BEFORE THE

DELAWARE PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

TIMOTHY S. LYONS

TIDEWATER UTILITIES, INC.

EXHIBIT T-7

November 2026

TABLE OF CONTENTS

I. INTRODUCTION 1

II. PURPOSE OF TESTIMONY 2

III. OVERVIEW OF CURRENT RATE CLASSES 6

IV. OVERVIEW OF THE COSS 8

V. FUNCTIONALIZATION OF COSTS 9

VI. ALLOCATION OF FUNCTIONALIZED COSTS 14

VII. RATE DESIGN 16

LIST OF EXHIBITS

Exhibit TSL-1 – Qualifications

Exhibit TSL-2 – Summary of COSS Study

Exhibit TSL-3 – Functionalization of Costs

Exhibit TSL-4 – Allocation of Functionalized Costs

Exhibit TSL-5 – Proposed Rate Design

Exhibit TSL-6 – Residential Bill Impact Analysis

I. INTRODUCTION

Q. Please state your name, occupation and business address.

A. My name is Timothy S. Lyons. I am a Partner with ScottMadden, Inc. My business address is 1 Speen Street, Suite 150, Framingham, Massachusetts 01701.

Q. On whose behalf are you submitting this testimony?

A. I am submitting this testimony on behalf of Tidewater Utilities, Inc. ("Tidewater" or the "Company") before the Delaware Public Service Commission (the "Commission").

Q. Please describe your professional experience.

A. I have more than 30 years of experience in the utility industry. I started my career in 1985 at Boston Gas Company, eventually becoming Director of Rates and Revenue Analysis. In 1993, I moved to Providence Gas Company, eventually becoming Vice President of Marketing and Regulatory Affairs. Starting in 2001, I held several management consulting positions in the energy industry first at KEMA and then at Quantec, LLC. In 2005, I joined Vermont Gas Systems, Inc. as Vice President of Sales and Marketing before joining Sussex Economic Advisors, LLC ("Sussex") in 2013. Sussex was acquired by ScottMadden in 2016.

Q. What is your educational background?

A. I hold a bachelor's degree from St. Anselm College, a master's degree in economics from The Pennsylvania State University, and a master's degree in business administration from Babson College.

Q. Have you previously sponsored testimony before the Commission?

A. Yes. I have sponsored testimony before more than 30 U.S. and Canadian regulatory agencies, including the Commission. A summary of my professional experience and education is included in Exhibit TSL-1.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my Direct Testimony is to sponsor the Company's proposed water rates. My Direct Testimony includes: (a) a description of the current rate classes and rates; (b) development of the Class Cost of Service Study ("COSS"); (c) development of the proposed rate design; and (d) analysis of residential customer bill impacts based on the proposed rate design.

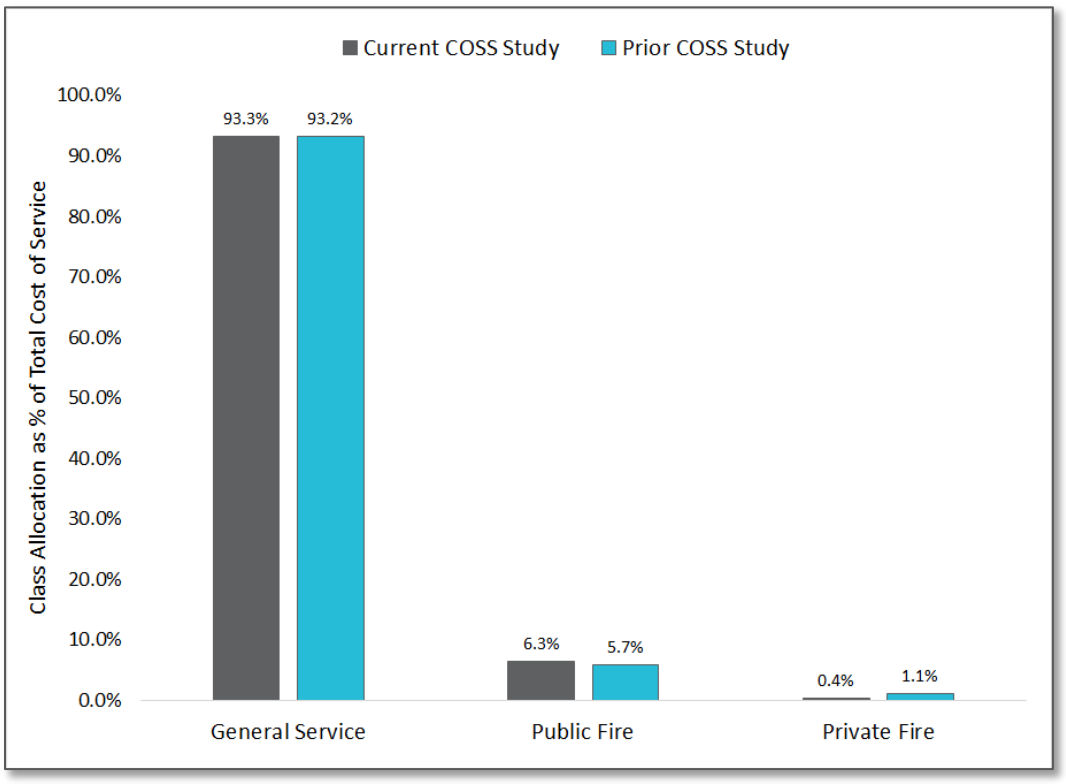
Q. Are you sponsoring exhibits in connection with your testimony?

A. Yes. I am sponsoring the exhibits in the table of contents (above). The exhibits were prepared by me or under my direction.

Q. Please summarize your Direct Testimony.

A. The results of the COSS show variation in the allocation of the Company's overall cost of service to each rate class, as shown in Figure 1 (below).

Figure 1: COSS Results



The Figure shows the general service, public fire, and private fire rate classes represent, respectively, 93.30 percent, 6.30 percent, and 0.40 percent of the Company's overall cost of service. The Figure also shows the percentages are generally consistent with the Company's prior study in Docket No. 24-0991.

The results of the COSS are summarized in Exhibit TSL-2. The Exhibit summarizes the functionalization and allocation of the Company's cost of service, respectively, by functional cost categories and rate classes.

The results of the COSS were used to guide development of the proposed rate design. First, the proposed fixed charges were designed to recover fixed costs, consisting of meters, services, billing, customer accounting, and maximum day and

peak hour capacity requirements. Costs not recovered through the proposed fixed charges are recovered through water usage charges.

Proposed public fire and private fire charges were designed to recover in aggregate the cost of fire protection.

Proposed bulk water service charges were designed to recover the overall increase in the Company's cost of service.

Overall, for residential customers in the Company's legacy service area, the proposed fixed and water usage charges will increase water bills for an average residential customer using 3,870 gallons per month by $9.80, from $53.00 per month to $62.80 per month, or 18.48 percent. 3,870 gallons per month represents average monthly usage for residential customers in the Company's legacy service area.

For residential customers in the Company's Broadkiln service area, the proposed fixed and water usage charges will increase water bills for an average residential customer using 3,920 gallons per month by $17.74, from $45.93 per month to $63.67 per month, or 38.63 percent. 3,920 gallons per month represents average monthly usage for residential customers in the Company's Broadkiln and Wilkerson service areas.

As discussed below, the proposed fixed and water usage charges for the Broadkiln and Wilkerson service areas reflect a partial movement to rate consolidation with the legacy service area. Since current revenues per customer in the Broadkiln and Wilkerson service areas are substantially lower than current revenues per customer in the legacy service area, the proposed movement to rate

consolidation results in a larger rate increase for customers in the Broadkiln and Wilkerson service areas than in the legacy serve area. The proposed fixed and water usage charges for Broadkiln and Wilkerson reflect a 50.00 percent movement to rate consolidation to help moderate customer bill impacts.

For residential customers in the Company's Wilkerson service area, the proposed fixed and water usage charges will increase water bills for an average residential customer using 3,920 gallons per month by $17.07, from $39.63 per month to $56.70 per month, or 43.07 percent. 3,920 gallons per month represents average monthly usage for residential customers in the Company's Broadkiln and Wilkerson service areas.

The Company proposes a full transition to rate consolidation for the Ocean View service area. Currently, revenues per customer in the Ocean View service area are much closer to the revenues per customer in the legacy service area; consequently, there is less need to moderate customer bill impacts as compared to the Broadkiln and Wilkerson service areas.

For residential customers in the Company's Ocean View service area, the proposed fixed and water usage charges will increase water bills for an average residential customer using 3,110 gallons per month by $15.82, from $52.03 per month to $67.85 per month, or 30.40 percent. 3,110 gallons per month represents average monthly usage for residential customers in the Company's Ocean View service area. Notably, customers in the Ocean View service area are currently billed quarterly. The Company proposes in this proceeding to change the frequency of customer billing from quarterly to monthly.

Q. How is the remaining portion of your testimony organized?

A. The remaining portion of my testimony is organized into the following sections.

- Section III provides an overview of the Company's current rate classes and rates.
- Section IV provides an overview of the Company's COSS.
- Section V describes functionalization of the Company's cost of service.
- Section VI describes allocation of functionalized cost of service to each rate class.
- Section VII describes development of the proposed rate design and evaluation of residential customer bill impacts.

III. OVERVIEW OF CURRENT RATE CLASSES

Q. Please describe the Company's service area.

A. The Company provides water service to approximately 63,000 customers in Delaware, of which 61,000 customers are in the Company's legacy service area, approximately 1,000 customers are in the Broadkiln and Wilkerson service areas, and approximately 1,000 customers are in the Ocean View service area.

Q. Please describe the Company's rate classes.

A. The Company provides water service to residential and commercial customers in the legacy service area through fixed charges that vary based on size of the meter and usage charges per thousands of gallons of water. The fixed charge structure is widely used to reflect that larger meters generally have higher costs and higher capacity flows than smaller meters. Residential usage charges consist of three

inverted or inclining block rates. Customers in the legacy and Broadkiln and Wilkerson service areas are currently billed monthly while customers in the Ocean View service area are currently billed quarterly. The Company proposes in this proceeding to change the frequency of customer billing from quarterly to monthly. The proposed rates for the Ocean View service area reflect the proposed change to monthly billing; i.e., the proposed fixed charges reflect monthly billing.

The Company also provides water service to residential and commercial customers in the Broadkiln and Wilkerson service areas through fixed charges that vary based on size of the meter and usage charges per thousands of gallons of water. Residential usage charges consist of three inverted or inclining block rates. As discussed further below, the Company proposes to continue phase-in of usage charges to help moderate customer bill impacts. Prior to the Company's last rate case, the Broadkiln and Wilkerson rate structure consisted of only fixed charges. Broadkiln and Wilkerson customers are billed monthly.

The Company provides water service to residential and commercial customers in the Ocean View service area through fixed charges that vary based on size of the meter and usage charges per thousands of gallons of water. Residential usage charges consist of a single rate. As discussed further below, the Company proposes to introduce three inverted or inclining block rates, consistent with the legacy and Broadkiln and Wilkerson service areas. Ocean View customers are currently billed quarterly.

The Company also provides water service for public and private fire protection. The charge for public fire protection is a fixed charge for customers

who receive public fire protection. The charge for private fire protection is a fixed charge that varies based on size of the meter.

Finally, the Company provides water service to two bulk water service customers: (1) Dover Air Force Base, for service to off-base housing in Eagle Meadows and Eagle Heights; and (2) Southern Shores, for service to Southern Shores Water Company.

The charges for bulk water service are based on water usage and vary based on the customer.

IV. OVERVIEW OF THE COSS

Q. What is the purpose of a COSS?

A. The purpose of a COSS is to allocate a utility's overall cost of service to each rate class in a manner that reflects its underlying cost of service. A COSS serves as a general guide for setting rates and charges.

Q. What was the approach to developing the COSS for this rate case filing?

A. The approach to developing the COSS for this rate case filing consisted of two steps. First, the Company's overall cost of service was allocated to one of seven functional cost categories. Second, functionalized costs were then allocated to each rate class. The functionalization and allocation methods generally followed the base-extra capacity method, as described in the American Water Works Association ("AWWA") M1 Manual.[1] The method allocates costs to functional cost categories

[1] Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices M1, Seventh Edition, American Water Works Association, Chapters III.1 and III.2.

based on base costs, extra capacity costs (maximum day and maximum hour), and customer costs, which consist of meter, service, billing, customer accounting, and hydrant cost categories.

Q. What data was used to prepare the COSS?

A. The COSS was based on test year data for the period October 1, 2025 through September 30, 2026, updated to reflect pro forma adjustments through June 30, 2027. The test year data includes the number of meters, water usage, and revenues by rate class. The COSS includes rate base items, such as water supply, water pumping, water treatment, transmission and distribution, and general plant. The COSS also includes operations and maintenance ("O&M") expense items, such as water supply, water pumping, water treatment, transmission and distribution, customer accounts, and administrative and general ("A&G") expenses.

V. FUNCTIONALIZATION OF COSTS

Q. What is functionalization?

A. Functionalization is the process of assigning rate base and expense items into operational or "functional" components. The functionalization of costs in the COSS was based on the Company's accounting records, consistent with the Uniform System of Accounts ("USOA") for Water Utilities.[2]

[2] National Association of Regulatory Utility Commissioners (NARUC) Uniform System of Accounts for Class A/B Water Companies.

Q. What were the functional cost categories used in the COSS?

A. There are four major functional cost categories: base costs, extra capacity costs, customer costs, and fire protection costs.

Base costs represent those costs incurred to meet base or average customer usage, *i.e.,* use at a relatively uniform rate throughout the year. In other words, base costs represent those costs associated with base or average customer use, without provision for meeting peak use requirements. Base costs generally include capital and operating costs associated with supply, pumping, treatment, and transmission and distribution facilities.

Extra capacity costs are those costs incurred to meet peak customer usage; *i.e.,* use in excess of base or average customer use. Typically, extra capacity costs are sub-divided into extra capacity – maximum day and extra capacity – maximum hour. Extra capacity costs generally include capital and operating costs for additional plant and system capacity beyond that required for average customer use.

Customer costs represent those costs incurred to provide customer access to the water system regardless of usage. Customer costs generally include meter reading, billing, and customer account services.

Fire protection costs represent those costs associated with fire protection, which principally include plant investments and O&M expenses for meeting fire protection requirements and hydrants.

Functionalization of the Company's cost of service is shown in Exhibit TSL-3. The Exhibit shows the functionalization of the Company's proforma rate base and expenses across the functional cost categories.

Q. How was the overall cost of service assigned to each functional cost category?

A. The overall cost of service was assigned to each functional cost category through allocation factors for each rate base and expense item. Some rate base and expense items were assigned to a single functional cost category, such as lab equipment was assigned only to the base cost category. Similarly, meter reading and billing costs were assigned only to the customer cost category.

There are other rate base and expense items assigned to multiple cost categories. Rate base and expense items to meet maximum daily demands, for example, are assigned to base cost and extra capacity – maximum day functions based on the relationship between the system's maximum day usage and the average day usage. If maximum water consumption is equal to 15.0 million gallons per day, for example, and average water consumption is 8.0 million gallons per day, facilities required to meet average daily demands would be assigned 53.3 percent (8.0 ÷ 15.0) to the base cost category and 46.7 percent (7.0 ÷ 15.0) to the extra capacity – maximum day category. Rate base and expense items to meet maximum hourly demands were assigned in a similar manner.

The functionalization approach used in this study was generally consistent with the approach used in the Company's most recent rate case filing.

Q. How were rate base items assigned to functional categories?

A. Rate base items were assigned to functional cost categories through various allocation methods, as shown in Exhibit TSL-3. The Exhibit shows most assignments were based on average day, maximum day, and maximum hour demand factors.

The Exhibit also shows that certain rate base items are used to provide bulk water service, such as water supply, water pumping, water treatment, and transmission and distribution plant investments. These rate base items were assigned to both retail and bulk water service customers. General plant investment was assigned to both retail and bulk water service customers based on a composite of the water supply, water pumping, water treatment, and transmission and distribution plant investment assignments.

Q. How were expense items assigned to functional categories?

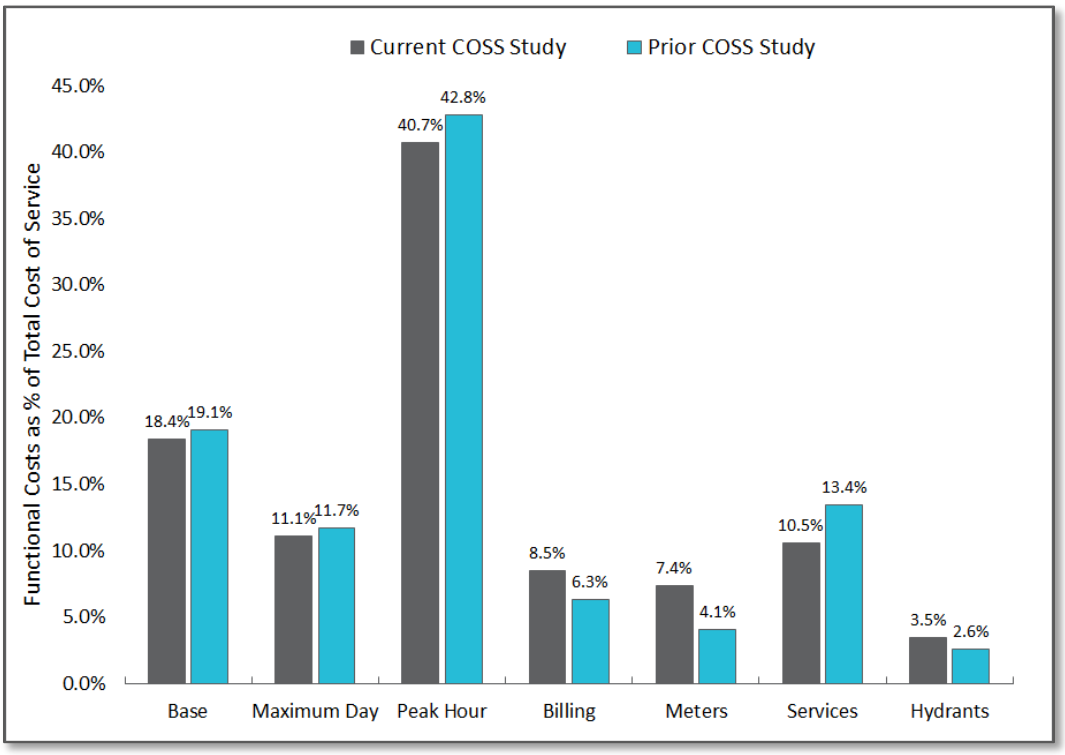
A. Expense items were assigned to functional cost categories through various allocation methods, as shown in Exhibit TSL-3. The Exhibit shows most assignments were based on average day, maximum day, and maximum hour demand factors.

The Exhibit also shows that certain expense items are used to provide bulk water service, such as water supply, water pumping, water treatment, and transmission and distribution expenses. These expense items were assigned to both retail and bulk water service customers. A&G expenses were assigned to both retail and bulk water service customers based on a composite of the water supply, water pumping, water treatment, and transmission and distribution expense assignments.

Q. What are the results of the functionalization of the Company's overall cost of service?

A. The results of the functionalization of the Company's overall cost of service are summarized in Figure 2 (below).

Figure 2: Functional Cost Categories



The Figure shows Base, Maximum Day, and Peak Hour demands represent, respectively, 18.40 percent, 11.10 percent, and 40.70 percent (collectively, 70.20 percent) of the Company's overall cost of service. The Figure also shows Billing, Meters, Services, and Hydrants represent, respectively, 8.50 percent, 7.40 percent, 10.50 percent, and 3.50 percent of the Company's overall cost of service. The Figure shows the percentages are generally consistent with the Company's prior COSS.

VI. ALLOCATION OF FUNCTIONALIZED COSTS

Q. What is allocation?

A. Allocation is the process of assigning rate base and expense items to each rate class based on allocators that best reflect how the costs are incurred. In other words, cost allocation follows how costs are incurred.

Q. What types of allocators were used to develop the COSS?

A. Functional costs were allocated to each rate class based on the following cost drivers:

- Average water demand.
- Maximum daily and peak hour water demand (demand factors).
- Number of bills.
- Number of Equivalent Residential Connections (ERC).

In general, average and peak demands were used to allocate base, excess capacity – maximum day, and excess capacity – maximum hour costs. ERCs were used to allocate meter and service costs. Number of bills was used to allocate customer service costs.

Allocation of the Company's cost of service is shown in Exhibit TSL-4. The Exhibit shows allocation of the Company's proforma rate base and expenses across the general service, public fire, and private fire rate classes.

Q. What demand factors were used in the COSS?

A. The Company utilized system demand ratios of 1.74 and 8.00, respectively, for maximum day and peak hour demands relative to average day demands.

The Company utilized a maximum fire demand flow rate of 4.32 million gallons per day (MGD).

Q. What ERC ratios were used in the COSS?

A. The ERC ratios used in the COSS were based on the Company's meter and service installation costs.

Q. How were functionalized costs allocated to each rate class?

A. Functionalized costs were allocated to each rate class based on methods that reflect how costs are incurred, as summarized in Figure 3 (below).

Figure 3: Summary of Allocation Methods

Functional Cost Categories	Allocation Method
Base Supply	Average Day Demands
Maximum Day	Maximum Day Demand Factor
Peak Hour	Peak Hour Demand Factor
Meters & Services	Number of ERCs
Billing & Customer Accounts	Number of Bills
Hydrants	Direct Assignment to Public Fire

The Figure shows base supply costs are allocated based on average day water demands for each rate class, while maximum day costs are allocated based on maximum day water demands for each class, which reflect the maximum day demand factors.

Q. What are the results of the allocation of the overall cost of service to each rate class?

A. The results of the allocation of the overall cost of service to each rate class are summarized in Figure 1 (above).

The Figure shows the general service, public fire, and private fire rate classes represent, respectively, 93.30 percent, 6.30 percent, and 0.40 percent of the Company's overall cost of service.

The results of the COSS were used as a guide to develop the proposed rate design. First, the proposed fixed charges were designed based on the fixed cost of service, including meters, services, billing, customer accounting, and maximum day and peak hour capacity requirements. Costs not recovered through the fixed charges are recovered through proposed water usage charges.

VII. RATE DESIGN

Q. Please describe the principles used to guide the proposed rate design.

A. The proposed rate design was guided by several principles commonly used throughout the industry, including: (a) rates should recover the overall cost of providing service; (b) rates should be fair, minimizing inter- and intra-class subsidies to the extent possible; and (c) rate changes should be tempered by rate continuity or gradualism concerns.

Because these principles can conflict, rate designs can reflect a level of judgment to balance these principles.

Q. Please summarize the steps taken to develop the proposed rates.

A. The results of the COSS were used as a guide to develop the proposed rate design. First, fixed charges were designed based on the fixed cost of service, including

meters, services, billing, customer accounting, and maximum day and peak hour capacity requirements. Costs not recovered through the fixed charges are recovered through proposed water usage charges.

Derivation of the Company's proposed fixed and usage charges is shown in Exhibit TSL-5. The Exhibit shows derivation of the proposed fixed and usage charges for residential and commercial customers. The Exhibit also shows derivation of the proposed charges for public fire, private fire, and bulk water service customers.

Q. What overall cost of service was used as a starting point to develop the proposed rates?

A. The overall cost of service used as a starting point to develop the proposed rates is presented in the testimony of Company witness David Njuguna. The testimony presents the Company's overall revenue requirement of $59.8 million.

Q. What approach was used to set revenue targets for each service area?

A. The Company proposes a revenue target for the Broadkiln and Wilkerson service areas that reflects a 50.00 percent movement to rate consolidation to help moderate customer bill impacts of a full transition to rate consolidation. Currently, revenues per customer in the legacy service area are substantially higher than revenues per customer in the Broadkiln and Wilkerson service areas. Specifically, current revenues per customer in the Company's legacy service area of $691.22 are 37.70 percent higher than current revenues per customer in the Broadkiln and Wilkerson service areas of $502.16.

The Company also proposes a revenue target for the Ocean View service area that reflects a full transition to rate consolidation. Currently, revenues per customer in the Ocean View service area are much closer to the revenues per customer in the legacy service area. Specifically, current revenues per customer in the Company's legacy service area of $691.22 are 10.40 percent higher than current revenues per customer in the Ocean View service area of $625.94.

Revenues not recovered in the Broadkiln and Wilkerson and Ocean View service areas are recovered in the legacy service area.

Q. How were the proposed fixed charges derived?

A. The proposed fixed charges were based on two steps, as shown in Exhibit TSL-5. First, the Company identified the costs to be recovered through fixed charges, consisting of (1) meter and service costs, (2) billing and customer accounting costs; and (3) a portion of costs for maintaining system capacity, referred to as "readiness to serve" costs.

Second, the Company developed proposed fixed charges by applying to current fixed charges the percentage increase in costs to be recovered through fixed charges. Exhibit TSL-5 shows development of the proposed fixed charges.

Q. What are "readiness to serve" costs?

A. Readiness-to-serve costs recognize there are costs incurred by the Company to maintain sufficient system capacity to provide water service to customers, regardless of the volume of water that customers consumed during a particular billing period.

The American Water Works Association's *Principles of Water Rates, Fees, and Charges*, Manual M1, recognizes that utilities may include a portion of capacity-related costs in fixed service charges because the facilities necessary to provide service must be maintained regardless of actual water consumption.

> "In some cases, utilities include other costs to provide service to a customer as a part of a service or meter charge. The argument is made that utilities make investments to provide the ability to serve, and that these costs must be recovered regardless of the amount of water used during a given period. This is sometimes referred to as a readiness-to-serve charge. […] The requirement to recover costs without regard to the volume of sales is real, but it does not necessarily suggest that fixed charges should represent a large portion of total revenue requirements, nor that the rate structure should match the cost structure of a utility. The use of a water system is reflected in both potential and average usage patterns, so a continued reliance on volumetric charges to recover fixed costs has value from an equity perspective".[3]

Readiness-to-serve costs include a portion of the Company's water pumping, water treatment, and transmission and distribution utility plant investments which are designed and stand ready to meet customer peak demand requirements.

Q. What is the Company's proposal regarding recovery of "readiness to serve" or fixed costs through the proposed fixed charges?

[3] Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices M1, Seventh Edition, American Water Works Association, pp. 151-152.

A. The Company proposes 20.00 percent of costs functionalized as Maximum Day and Peak Hour to be recovered through fixed charges with the remaining 80.00 percent of costs recovered through usage charges.

The proposed percentages recognize that a portion of the fixed costs associated with meeting maximum demand must be incurred to maintain available system capacity, regardless of actual water consumption while at the same time, recovering most of these costs through usage charges thus preserving the relationship between customer usage and the rates paid for water service.

The Company believes the proposed approach strikes an appropriate balance between recovering costs of maintaining service availability and encouraging efficient water consumption.

Q. How were the proposed usage charges derived?

A. The proposed usage charges were based on costs not recovered in the fixed charges, as shown in Exhibit TSL-5.

Q. What are the proposed changes in fixed charges for public and private fire protection?

A. The Company proposes no change in public fire and private fire charges, as shown in Exhibit TSL-5, since the current charges in aggregate recover the cost of fire protection.

Q. How were the proposed charges for bulk water service customers derived?

A. The proposed charges for bulk water service customers were based on the overall percentage increase in the Company's cost of service of 19.77 percent, as shown in Exhibit TSL-5.

Q. Have you examined the impact of the proposed fixed and usage charges on residential customer bills in the Company's legacy service area as well as the Broadkiln and Wilkerson and Ocean View service areas?

A. Yes. The impact of the proposed fixed and usage charges on residential customer bills in the Company's legacy service area as well as in the Broadkiln and Wilkerson and Ocean View service areas is shown in Exhibit TSL-6.

Overall, for residential customers in the Company's legacy service area, the proposed fixed and water usage charges will increase water bills for an average residential customer using 3,870 gallons per month by $9.80, from $53.00 per month to $62.80 per month, or 18.48 percent. 3,870 gallons per month represents average monthly usage for residential customers in the Company's legacy service area.

For residential customers in the Company's Broadkiln service area, the proposed fixed and water usage charges will increase water bills for an average residential customer using 3,920 gallons per month by $17.74, from $45.93 per month to $63.67 per month, or 38.63 percent. 3,920 gallons per month represents average monthly usage for residential customers in the Company's Broadkiln and Wilkerson service areas.

For residential customers in the Company's Wilkerson service area, the proposed fixed and water usage charges will increase water bills for an average

residential customer using 3,920 gallons per month by $17.07, from $39.63 per month to $56.70 per month, or 43.07 percent. 3,920 gallons per month represents average monthly usage for residential customers in the Company's Broadkiln and Wilkerson service areas.

For residential customers in the Company's Ocean View service area, the proposed fixed and water usage charges will increase water bills for an average residential customer using 3,110 gallons per month by $15.82, from $52.03 per month to $67.85 per month, or 30.40 percent. 3,110 gallons per month represents average monthly usage for residential customers in the Company's Ocean View service area.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Summary of Qualifications

Tim Lyons is a partner with ScottMadden with more than 30 years of experience in the energy industry. Tim has held senior positions at several gas utilities and energy consulting firms. His experience includes rates and regulatory support, sales and marketing, customer service and strategy development. Prior to joining ScottMadden, Tim served as Vice President of Sales and Marketing for Vermont Gas. He has also served as Vice President of Marketing and Regulatory Affairs for Providence Gas Company, Director of Rates at Boston Gas Company, and Project Director at Quantec, LLC, an energy consulting firm.

Tim has sponsored testimony before more than 30 U.S. and Canadian regulatory agencies. Tim holds a bachelor's degree from St. Anselm College, a master's degree in economics from The Pennsylvania State University, and a master's degree in business administration from Babson College.

Areas of Specialization

- Regulation and Rates
- Retail Energy
- Utilities
- Natural Gas

Capabilities

- Regulatory Strategy and Rate Case Support
- Strategic and Business Planning
- Capital Project Planning
- Process Improvements

Articles and Speeches

- "Country Strong: Vermont Gas shares its comprehensive effort to expand natural gas service into rural communities." ***American Gas Association***, June 2011 (with Don Gilbert).
- "Talking Safety With Vermont Gas." ***American Gas Association***, February 2009 (with Dave Attig).
- "Consumers Say 'Act Now' To Stabilize Prices." ***Power & Gas Marketing***, September/ October 2001 (with Jim DeMetro and Gerry Yurkevicz).
- "Rate Reclassification: Who Buys What and When." ***Public Utilities Fortnightly***, October 15, 1991 (with John Martin).

Sponsor	Date	Docket No.	Subject
Regulatory Commission of Alaska			
Cook Inlet Natural Gas Storage Alaska, LLC	7/21	Docket No. U-21-058	Sponsored testimony supporting the lead-lag study/cash working capital requirement for a general rate case proceeding.
ENSTAR Natural Gas Company	06/16	Docket No. U-16-066	Adopted and sponsored testimony supporting a lead-lag study for a general rate case proceeding.
Arizona Corporation Commission			
Southwest Gas Corporation	02/24	Docket No. G-01551A-23-0341	Sponsored testimony supporting class cost of service, rate design and bill impact analysis for a general rate case proceeding.
Southwest Gas Corporation	12/21	Docket No. G-01551A-21-0368	Sponsored testimony supporting class cost of service, rate design and bill impact analysis for a general rate case proceeding.
Arkansas Public Service Commission			
Summit Utilities, Inc.	01/24	Docket No. 23-079-U	Sponsored testimony supporting class cost of service, rate design and bill impact analysis for a general rate case proceeding.
Liberty Utilities (The Empire District Electric Company)	2/23	Docket No. 22-085-U	Sponsored testimony supporting the class cost of service, rate design, bill impact studies, and revenue decoupling for a general rate case proceeding.
Liberty Utilities (Pine Bluff Water)	10/18	Docket No. 18-027-U	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding.
California Public Utilities Commission			
Liberty Utilities (CalPeco Electric)	9/24	Application No. 24-09-010	Sponsored testimony supporting the marginal cost study, rate design and bill impact analysis for a general rate case proceeding.
Liberty Utilities (Apple Valley Water)	01/24	Application No. 24-01-0003	Sponsored testimony supporting rate design studies for a general rate case proceeding.
Liberty Utilities (Park Water)	01/24	Application No. 24-01-0002	Sponsored testimony supporting rate design studies for a general rate case proceeding.
Bear Valley Electric Service, Inc.	10/22	Application No. 22-08-010	Sponsored testimony supporting marginal cost study, rate design and bill impact analysis for a general rate case proceeding.
Liberty Utilities (CalPeco Electric)	5/21	Application No. 21-05-017	Sponsored testimony supporting the lead-lag study/cash working capital, marginal cost study, rate design and bill impact analysis for a general rate case proceeding.
Southwest Gas Corporation (Southern California, Northern California, and South Lake Tahoe jurisdictions)	8/19	Application No. 19-08-015	Sponsored testimony on behalf of three separate rate jurisdictions supporting revenue requirements, lead-lag/ cash working capital, and class cost of service, rate design and bill impact analysis for a general rate case proceeding.
Colorado Public Utilities Commission			
Colorado Natural Gas (Summit Utilities)	01/24	Proceeding No. 23A-0570G	Sponsored the Fully Distributed Cost (FDC) study in support of a Cost Assignment and Allocation Manual (CAAM) application.
Connecticut Public Utilities Regulatory Authority			
Yankee Gas Company	07/14	Docket No. 13-06-02	Sponsored report and testimony supporting the review and evaluation of gas expansion policies, procedures, and analysis.
Delaware Public Service Commission			
Artesian Water Company	04/25	Docket No. 25-0346	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding.
Tidewater Utilities, Inc	08/24	Docket No. 24-0991	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding.
Artesian Water Company	04/23	Docket No. 23-0601	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding.
Federal Energy Regulatory Commission			

Sponsor	Date	Docket No.	Subject
North Carolina Electric Membership Corporation	2/26	Docket No. EL26-47-000	Sponsored testimony supporting a review of transmission cost allocation methods.
Illinois Commerce Commission			
Ameren Illinois Company d/b/a Ameren Illinois	6/24	Docket 22-0487/ 23-0082/ 24-0238 (cons.)	Sponsored rebuttal testimony supporting a marginal cost study for a Multi-Year Integrated Grid Plan (Grid Plan) proceeding.
Liberty Utilities (Midstates Natural Gas)	12/23	Docket No. 23-0380	Sponsored testimony supporting cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
Ameren Illinois Company d/b/a Ameren Illinois	1/23	Docket No. 22-0487	Sponsored testimony supporting a Multi-Year Integrated Grid Plan (Grid Plan). Prepared research and analysis evaluating the reasonableness of the Grid Plan through comparison to how other electric utilities have responded to the changing energy landscape.
Liberty Utilities (Midstates Natural Gas)	07/16	Docket No. 16-0401	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new commercial classes and a decoupling mechanism.
Iowa Utilities Board			
Liberty Utilities (Midstates Natural Gas)	07/16	Docket No. RPU-2016-0003	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony also includes proposal for new commercial classes.
Kansas Corporation Commission			
The Empire District Electric Company	12/18	Docket No. 19-EPDE-223-RTS	Sponsored testimony supporting cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
Kentucky Public Service Commission			
American Electric Power - Kentucky Power Company	08/25	Case No. 2025-00257	Sponsored testimony supporting the lead-lag study for a general rate case proceeding.
Kentucky Utilities Company	05/25	Case No 2025-00113	Sponsored testimony supporting cost of service and rate design studies for a general rate case proceeding.
Louisville Gas and Electric Company	05/25	Case No 2025-00114	Sponsored testimony supporting cost of service and rate design studies for a general rate case proceeding.
Bluegrass Water Utility (Central States Water Company)	02/23	Case No. 2022-00432	Sponsored testimony supporting the rate design and bill impact studies for a general rate case proceeding.
Maine Public Utilities Commission			
Northern Utilities, Inc. d/b/a Unitil	06/26	Docket No. 2026-00049	Sponsored testimony supporting a marginal cost study, class cost of service study, rate design and customer bill impact for a general rate case proceeding.
Maine Water Company	04/26	Docket No. 2026-00028	Sponsored testimony supporting the class cost of service, rate design, and bill impact studies for a general rate case proceeding for the 10 water utility divisions.
Maine Water Company	12/24	Docket No. 2024-00378	Sponsored testimony supporting a two-phased approach to consolidate or unify rate schedules for 10 water utility divisions.
Maine Water Company	10/24	Docket No. 2024-00291	Sponsored testimony supporting the class cost of service, rate design, and bill impact studies for a general rate case proceeding for the Camden and Rockland Division.
Calpine Corporation and Casco Bay Energy Company	10/24	Docket No. 2024-00137	Sponsored testimony regarding ratemaking treatment of Net Energy Billing stranded cost rate design.
Northern Utilities, Inc. d/b/a Unitil	05/23	Docket No. 2023-00051	Sponsored testimony supporting a marginal cost study, class cost of service study, rate design and customer bill impact for a general rate case proceeding.

Sponsor	Date	Docket No.	Subject
Maine Water Company	03/21	Docket No. 2021-00053	Sponsored testimony supporting a proposed rate smoothing mechanism.
Northern Utilities, Inc. d/b/a Unitil	06/19	Docket No. 2019-00092	Sponsored testimony supporting a proposed capital investment cost recovery mechanism.
Northern Utilities, Inc. d/b/a Unitil	06/15	Docket No. 2015-00146	Sponsored testimony supporting the proposed gas expansion program, including a zone area surcharge.
Maryland Public Service Commission			
Artesian Water Company	9/26	Case No. 9907	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding.
The Potomac Edison Company (FirstEnergy)	03/23	Case No. 9695	Sponsored testimony supporting the class cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
Sandpiper Energy, a Chesapeake Utilities company	12/15	Case No. 9410	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new residential and commercial classes.
Massachusetts Department of Public Utilities			
Berkshire Gas Company, Eversource Energy, Liberty Utilities, National Grid, and Unitil	03/22	Docket No. DPU 20-80	Sponsored report that summarizes research, findings, and recommendations for regulatory mechanisms, methodologies, and policies that support Massachusetts's achievement of its net zero climate goal by 2050. The regulatory designs were informed by the results of quantitative and qualitative analysis of decarbonization pathways to achieve the Commonwealth's climate goals.
Liberty Utilities (New England Gas Company)	08/20	Docket No. DPU 20-92	Sponsored the Long-Range Forecast and Supply Plan filing for the five-year forecast period 2020/2021 through 2024/2025.
Eversource Energy, National Grid, and Unitil	02/20	Docket No. DPU 19-55	Sponsored report that summarizes research and evaluation of funding approaches for infrastructure modifications that interconnect Distributed Generation (DG) projects.
Liberty Utilities (New England Gas Company)	07/18	Docket No. DPU 18-68	Sponsored the Long-Range Forecast and Supply Plan filing for the five-year forecast period 2018/2019 through 2022/2023.
Liberty Utilities (New England Gas Company)	07/16	Docket No. DPU 16-109	Sponsored the Long-Range Forecast and Supply Plan filing for the five-year forecast period 2016/2017 through 2020/2021.
Boston Gas	10/93	Docket No. DPU 92-230	Sponsored testimony describing the Company's position regarding rate treatment of vehicular natural gas investments and expenses.
Boston Gas	03/90	Docket No. DPU 90-55	Sponsored testimony supporting the weather and other cost of service adjustments, rate design and customer bill impact studies for a general rate case proceeding.
Boston Gas	03/88	Docket No. DPU 88-67-II	Sponsored testimony supporting the rate reclassification of commercial and industrial customers for a rate design proceeding.
Michigan Public Service Commission			
Lansing Board of Water & Light and Michigan State University	04/26	Case No. U-21981	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.
DTE Energy	04/25	Case No. U-21860	Sponsored testimony regarding DTE Energy's use of constant dollar averaging to develop its cost forecasts.
Lansing Board of Water & Light and Michigan State University	04/25	Case No. U-21806	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.

Sponsor	Date	Docket No.	Subject
Lansing Board of Water & Light and Michigan State University	04/24	Case No. U-21490	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.
Lansing Board of Water & Light and Michigan State University	04/23	Case No. U-21308	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.
Lansing Board of Water & Light and Michigan State University	04/22	Case No. U-21148	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.
Lansing Board of Water & Light and Michigan State University	04/20	Case No. U-20650	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.
Lansing Board of Water & Light and Michigan State University	04/19	Case No. U-20322	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.
Midland Cogeneration Ventures, LLC	09/18	Case No. U-18010	Sponsored testimony evaluating Consumer Energy's class cost of service and rate design proposals.
Minnesota Public Utilities Commission			
Northern States Power Company (XcelEnergy)	10/21	Docket No. E002/GR-21-630	Sponsored testimony supporting a Return on Equity (ROE) adjustment mechanism that would allow the Company to symmetrically adjust its ROE to reflect significant changesin financial market conditions.
Missouri Public Service Commission			
The Empire District Electric Company	11/24	Docket No. ER-2024-0261	Sponsored testimony supporting the class cost of service, rate design, bill impact, and lead-lag studies for a general rate case proceeding.
Spire Missouri, Inc.	11/24	Docket No. GR-2024-0107	Sponsored testimony supporting the class cost of service, rate design, bill impact, and lead-lag studies for a general rate case proceeding.
Liberty Utilities (Missouri Water)	03/24	Docket No. WR-2024-0104	Sponsored testimony supporting lead-lag study for a general rate case proceeding.
Liberty Utilities (Midstates Natural Gas)	02/24	Docket No. GR-2024-0106	Sponsored testimony supporting the class cost of service, rate design, bill impact, and lead-lag studies for a general rate case proceeding.
Confluence Rivers Utility Operating Company	12/22	Case No. WR-2023-0006/ SR-2023-0007	Sponsored testimony supporting the rate design and bill impact studies for a general rate case proceeding.
The Empire District Gas Company	08/21	Docket No. GR-2021-0320	Sponsored testimony supporting the class cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
The Empire District Electric Company	05/21	Docket No. ER-2021-0312	Sponsored testimony supporting the class cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
Spire Missouri, Inc.	12/20	Docket No. GR-2021-0108	Sponsored testimony supporting class cost of service, rate design, and lead-lag study proposals for a general rate case proceeding. The testimony also included support for a proposed revenue adjustment mechanism.
The Empire District Electric Company	08/19	Docket No. ER-2019-0374	Sponsored testimony supporting the class cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding. The testimony also included proposals for a weather normalization mechanism.

Sponsor	Date	Docket No.	Subject
Liberty Utilities (Midstates Natural Gas)	09/17	Docket No. GR-2018-0013	Sponsored testimony supporting the class cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding. The testimony also included proposals for a revenue decoupling/ weather normalization mechanism as well as tracker accounts for certain O&M expenses and capital costs.
Missouri Gas Energy	04/17	Docket No. GR-2017-0216	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding. The testimony included support for a decoupling mechanism.
Laclede Gas Company	04/17	Docket No. GR-2017-0215	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding. The testimony included support for a decoupling mechanism.
Nevada Public Utilities Commission			
Southwest Gas Corporation	09/23	Docket No. 23-09012	Sponsored testimony supporting the class cost of service,rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
Southwest Gas Corporation	09/21	Docket No. 21-09001	Sponsored testimony supporting the class cost of service,rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
Southwest Gas Corporation	02/20	Docket No. 20-02023	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
New Hampshire Public Utilities Commission			
Unitil (Northern Utilities, Inc.)	04/26	Docket No. DG 26-008	Sponsored testimony supporting a marginal cost study, class cost of service study, rate design, customer bill impacts, and revenue decoupling for a general rate case proceeding. The testimony also includes a proposal for new C&I rate class.
Unitil Energy Systems, Inc.	05/25	Docket No. DE 25-025	Sponsored testimony supporting a marginal cost study, class cost of service study, rate design, customer bill impacts, and revenue decoupling for a general rate case proceeding.
Unitil (Northern Utilities, Inc.)	08/21	Docket No. DG 21-104	Sponsored testimony supporting a revenue decoupling mechanism.
Unitil Energy Systems, Inc.	04/21	Docket No. DE 21-030	Sponsored testimony supporting a revenue decoupling mechanism.
Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities	11/17	Docket No. DG 17-198	Sponsored testimony supporting a levelized cost analysis for approval of firm supply and transportation agreements.
Liberty Utilities d/b/a Granite State Electric Company	04/16	Docket No. DE 16-383	Adopted testimony and sponsored Lead/Lag study for a general rate case proceeding.
New Jersey Board of Public Utilities			
South Jersey Gas Company	11/25	Docket No. GR25110627	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Middlesex Water Company	07/25	Docket No. WR25060372	Sponsored testimony supporting the class cost of service, rate design, and customer bill impacts for a general rate case proceeding.
Elizabethtown Gas Company	02/24	Docket No. GR24020158	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Jersey Central Power and Light Company (FirstEnergy)	03/23	Docket No. ER23030144	Sponsored testimony supporting the class cost of service and Lead/Lag studies for a general rate case proceeding.

Sponsor	Date	Docket No.	Subject
South Jersey Gas Company	04/22	Docket No. GR22040253	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Elizabethtown Gas Company	12/21	Docket No. GR21121254	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
South Jersey Gas Company	03/20	Docket No. GR20030243	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Elizabethtown Gas Company	04/19	Docket No. GR19040486	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas Company	08/16	Docket No. GR16090826	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
New Mexico Public Regulation Commission			
New Mexico Gas Company, Inc.	06/25	Advice Notice No. 109 in Case No. 23-00255-UT	Sponsored testimony supporting the Weather Normalization Adjustment Mechanism.
New Mexico Gas Company, Inc.	12/24	Advice Notice No. 105	Sponsored testimony supporting changes in Rule No. 16 – Line Extension Policy.
New Mexico Gas Company, Inc.	07/24	Case No. 18-00038-UT	Sponsored testimony supporting the Weather Normalization Adjustment Mechanism.
New Mexico Gas Company, Inc.	09/23	Case No. 23-00255-UT	Sponsored testimony supporting the class cost of service, rate design, bill impact and weather normalization adjustment mechanisms for a general rate case proceeding.
New York Public Service Commission			
Rochester Gas and Electric	05/25	Case No. 25-G-0380	Sponsored testimony related to a classification study of residential and C&I customers in compliance with the Company's prior rate case in Cases 22-E-0317 et. al.
New York Power Authority	09/04	Case No. 04-E-0572	Sponsored testimony evaluating Con Edison's class cost of service study.
Corporation Commission of Oklahoma			
Summit Utilities/Arkansas Oklahoma Gas	05/26	Cause No. PUD 2026-000012	Sponsored testimony supporting the gas distribution rates for a general rate case proceeding.
Summit Utilities Oklahoma	06/25	Cause No. PUD 2025-000028	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
The Empire District Electric Company	02/21	Cause No. PUD 202100163	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding. The proposed rate design included a three-year phase-in of the proposed rate increase.
The Empire District Electric Company	03/19	Cause No. PUD 201800133	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
The Empire District Electric Company	04/17	Cause No. PUD 201600468	Adopted direct testimony and sponsored rebuttal testimony supporting the revenue requirements for a general rate case proceeding. The testimony included proposals for alternative ratemaking mechanisms.
Ohio Public Utilities Commission			
Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company	06/24	Case Nos. 24-0468-EL-AIR, 24-0469-EL-ATA, 24-0470-EL-AAM, 24-0471-EL-UNC	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.

Sponsor	Date	Docket No.	Subject
Pennsylvania Public Utility Commission			
FirstEnergy Pennsylvania Electric Company	04/24	Docket No. R-2024-3047068	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
Rhode Island Public Utilities Commission			
Providence Gas Company	09/00 01/97 08/96	Docket No. 1673	Sponsored testimony supporting the changes in cost of gas adjustment factor related to projected under-recovery of gas costs; Filed testimony and witness for pilot hedging program to mitigate price risks to customers; Filed testimony and witness for changes in cost of gas adjustment factor related to extension of rate plan.
Providence Gas Company	08/00	Docket No. 2581	Sponsored testimony supporting the extension of a rate plan that began in 1997 and included certain modifications, including a weather normalization clause.
Providence Gas Company	03/00	Docket No. 3100	Sponsored testimony supporting the de-tariff and deregulation of appliance repair service, enabling the Company to have needed pricing flexibility.
Providence Gas Company	08/97	Docket No. 2581	Sponsored testimony supporting a rate plan that fixed all billing rates for three-year period; included funding for critical infrastructure investments in accelerated replacement of mains and services, digitized records system, and economic development projects.
Providence Gas Company	04/97	Docket No. 2552	Sponsored testimony supporting the rate design, customer bill impact studies and retail access tariffs for commercial and industrial customers, including redesign of cost of gas adjustment clause, for a rate design proceeding.
Providence Gas Company	11/95	Docket No. 2374	Sponsored testimony supporting the rate design, customer bill impact studies and retail access tariffs for largest commercial and industrial customers for a rate design proceeding.
Providence Gas Company	07/94	Docket No. 2025	Sponsored testimony supporting the Integrated Resource Plan filing, including a performance-based incentive mechanism.
Providence Gas Company	07/93	Docket No. 2076/ 2082	Sponsored testimony supporting the rate reclassification of customers into new rate classes, rate design (including introduction of demand charges), and customer bill impact studies for a rate design proceeding.
Railroad Commission of Texas			
Texas Gas Service Company – Central-Gulf, West North, and Rio Grande Valley Service Areas	06/25	Case No. 00028202	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – Central-Gulf Service Area	06/24	Case No. 00017471	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy – Texas Gas Division	10/23	Case No. 00015513	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – Rio Grande Valley Service Area	06/23	Case No. 00014399	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – West Texas, North Texas, and Borger/ Skellytown Service Areas	06/22	Case No. 00009896	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.

Sponsor	Date	Docket No.	Subject
Texas Gas Service Company – Central Texas and Gulf Coast Service Areas	12/19	GUD No. 10928	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy – Beaumont/ East Texas Division	11/19	GUD No. 10920	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – Borger/ Skellytown Service Area	08/18	GUD No. 10766	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – North Texas Service Area	06/18	GUD No. 10739	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy – South Texas Division	11/17	GUD No. 10669	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – Rio Grande Valley Service Area	06/17	GUD No. 10656	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Atmos Pipeline – Texas	01/17	GUD No. 10580	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy – Texas Gulf Division	11/16	GUD No. 10567	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Public Utility Commission of Texas			
CenterPoint Energy Houston Electric, LLC	03/24	Docket No. 56211	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy Houston Electric, LLC	04/19	Docket No. 49421	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Vermont Public Utilities Commission			
Vermont Gas Systems	12/12	Docket No. 7970	Sponsored testimony describing the market served by $90 million natural gas expansion project to Addison County, VT. Also described the terms and economic benefits of a special contract with International Paper.
Vermont Gas Systems	02/11	Docket No. 7712	Sponsored testimony supporting the market evaluation and analysis for a system expansion and reliability regulatory fund.
Virginia State Corporation Commission			
Kentucky Utilities Company/Old Dominion Power	04/26	Case No. PUR-2026-00051	Sponsored testimony supporting the market comparison study related to affiliate service costs.
Shenandoah Valley Electric Cooperative	04/26	Case No. PUR-2026-00016	Sponsored report and studies related to revenue requirements, class cost of service, rate design, and bill impact analysis for a streamlined application to increase base rates.
Rappahannock Electric Cooperative	3/25	Case No. PUR-2025-00048	Sponsored testimony supporting a new Large Power-Dedicated Facilities (LP-DF) rate schedule
Rappahannock Electric Cooperative	8/24	Case No. PUR-2024-00132	Sponsored report and studies related to revenue requirements, class cost of service, rate design, and bill impact analysis for a streamlined application to increase base rates.
Shenandoah Valley Electric Cooperative	01/24	Case No. PUR-2023-00207	Sponsored report and studies related to revenue requirements, class cost of service, rate design, and bill impact analysis for a streamlined application to increase base rates.
American Electric Power - Appalachian Power Company	03/23	Case No. PUR-2023-00002	Sponsored testimony supporting the Lead/Lag study for the 2023 triennial review of base rates, terms, and conditions.

Sponsor	Date	Docket No.	Subject
Rappahannock Electric Cooperative	10/22	Case No. PUR-2022-00160	Sponsored report and studies related to revenue requirements, class cost of service, rate design, and bill impact analysis for a streamlined application to increase base rates.
American Electric Power - Appalachian Power Company	3/20	Case No. PUR-2020-00015	Sponsored testimony supporting the Lead/Lag study for the 2020 triennial review of base rates, terms, and conditions.
West Virginia Public Service Commission			
American Electric Power - Appalachian Power Company and Wheeling Power Company	11/24	Case No. 24-0854-E-42T	Sponsored testimony supporting the lead-lag study for a general rate case proceeding.
Monongahela Power Company and The Potomac Edison Company (FirstEnergy)	06/23	Case No. 23-0460-E-42T	Sponsored testimony supporting the class cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
Public Service Commission of Wisconsin			
Wisconsin Power and Light Company	12/25	Docket No. 6680-CG-171	Sponsored testimony supporting cost allocation methodology for WPL's Rock County Liquified Natural Gas Project.
Alberta Utilities Commission			
Capital Region Northeast Water Company	07/25	Proceeding No. 29831	Sponsored testimony supporting an independent review of CRN's approach to establishing rates.
Nova Scotia Utility and Review Board			
Nova Scotia Power	09/25	Matter No. M12451	Sponsored evidence supporting the cash working capital requirement and lead/Lag study for a general rate case proceeding.
Nova Scotia Power	01/22	Matter No. M10431	Sponsored evidence supporting the cash working capital requirement and lead/Lag study for a general rate case proceeding.
Ontario Energy Board			
Toronto Hydro-Electric System Limited	11/23	Docket No. EB-2023-0195	Sponsored evidence supporting Toronto Hydro's Custom Rate Framework. Prepared research and analysis evaluating the appropriateness of the Rate Framework in the context of how other electric utility ratemaking practices have responded to developments in the energy industry.
Ontario Energy Association	01/21	Docket No. EB-2020-0133	Sponsored evidence regarding policies and ratemaking treatment related to COVID-19 costs in U.S. and Canadian regulatory jurisdictions. The evidence was used to support Ontario Energy Association's response to Staff's proposals.
Commission of Canada Energy Regulator			
Trans-Northern Pipelines, Inc.	06/23	Docket No. RH-001-2023	Sponsored evidence related to application for approval of incentive tolls.

Tidewater Utilities Class Cost of Service Summary	Test Year Total	General Water	Public Fire	Private Fire
Rate Base	$ 223,705,282	$ 206,742,809	$ 16,178,879	$ 783,595
Rate of Return	7.81%	7.81%	7.81%	7.81%
Required Operating Income	**$ 17,481,673**	**$ 16,156,124**	**$ 1,264,315**	**$ 61,235**
Operating Expenses				
O&M	$ 27,110,755	$ 25,510,891	$ 1,488,033	$ 111,831
Depreciation	9,169,369	$ 8,537,980	$ 600,970	$ 30,419
Taxes	5,998,360	$ 5,546,948	$ 429,884	$ 21,528
Total Operating Expenses	**$ 42,278,484**	**$ 39,595,818**	**$ 2,518,887**	**$ 163,778**
Total Revenue Requirement	$ 59,760,157	$ 55,751,942	$ 3,783,202	$ 225,013
Less: Other Revenues	(526,089)	(490,803)	(33,305)	(1,981)
Sales Revenue Requirement	**$ 59,234,068**	**$ 55,261,139**	**$ 3,749,897**	**$ 223,032**

Tidewater Utilities Class Cost of Service Summary	Test Year Total	General Water	Public Fire	Private Fire
Sales Revenue Requirement				
Base	$ 10,870,175	$ 10,761,473	$ 98,484	$ 10,218
Maximum Day	6,581,044	6,411,085	153,983	15,976
Peak Hour	24,095,920	22,497,645	1,448,038	150,238
Billing/Commercial	5,022,656	4,984,629	-	38,027
Meters	4,371,815	4,371,815	-	-
Services	6,243,065	6,234,491	-	8,573
Hydrants	2,049,393	-	2,049,393	-
Sales Revenue Requirement	**$ 59,234,068**	**$ 55,261,139**	**$ 3,749,897**	**$ 223,032**
Current Revenues	$ 49,457,789	$ 44,920,962	$ 3,286,404	$ 1,250,423
Increase $	$ 9,776,279	$ 10,340,177	$ 463,493	$ (1,027,391)
Increase %	19.8%	23.0%	14.1%	-82.2%
Proposed Contract Revenues	**$ 1,394,703**			
Base	$ 255,945	$ 253,386	$ 2,319	$ 241
Maximum Day	154,955	150,953	3,626	376
Peak Hour	567,354	529,721	34,095	3,537
Billing/Commercial	118,262	117,366	-	895
Meters	102,937	102,937	-	-
Services	146,997	146,795	-	202
Hydrants	48,254	-	48,254	-
Proposed Contract Revenues	**$ 1,394,703**	**$ 1,301,158**	**$ 88,294**	**$ 5,251**
Sales Rev. Requirement exc. Contracts				
Base	$ 10,614,230	$ 10,508,088	$ 96,165	$ 9,977
Maximum Day	6,426,089	6,260,132	150,357	15,600
Peak Hour	23,528,567	21,967,923	1,413,943	146,700
Billing/Commercial	4,904,394	4,867,263	-	37,131
Meters	4,268,878	4,268,878	-	-
Services	6,096,068	6,087,696	-	8,371
Hydrants	2,001,139	-	2,001,139	-
Sales Rev. Requirement exc. Contracts	**$ 57,839,364**	**$ 53,959,981**	**$ 3,661,603**	**$ 217,780**
Current Revenues exc. Contracts	$ 48,293,275	$ 43,756,448	$ 3,286,404	$ 1,250,423
Increase $	$ 9,546,089	$ 10,203,532	$ 375,200	$ (1,032,642)
Increase %	19.8%	23.3%	11.4%	-82.6%

Tidewater Utilities Class Cost of Service Summary	Test Year Total	General Water	Public Fire	Private Fire
Rate of Return - Current Rates				
Revenues (incl. Contracts, Other)	$ 49,983,878	$ 45,411,765	$ 3,319,709	$ 1,252,404
Operating Expenses				
Operation and Maintenance	$ 27,110,755	$ 25,510,891	$ 1,488,033	$ 111,831
Depreciation & Amortization	$ 9,169,369	$ 8,537,980	$ 600,970	$ 30,419
Taxes Other than Income	$ 1,148,338	$ 1,064,567	$ 79,249	$ 4,522
Operating Expenses Before Income Taxes	$ 37,428,462	$ 35,113,438	$ 2,168,252	$ 146,772
Operating Income Before Income Taxes	$ 12,555,416	$ 10,298,328	$ 1,151,457	$ 1,105,631
State Income Taxes	$ 684,623	$ 632,711	$ 49,514	$ 2,398
Federal Income Taxes	$ 1,412,252	$ 1,305,168	$ 102,137	$ 4,947
Utility Operating Income	$ 10,458,541	$ 8,360,449	$ 999,806	$ 1,098,287
Rate Base	$ 223,705,282	$ 206,742,809	$ 16,178,879	$ 783,595
Rate of Return	4.68%	4.04%	6.18%	140.16%
Total Fire			12.37%	
Rate of Return - Proposed Rates				
Revenues (incl. Contracts, Other)	$ 59,760,119	$ 55,081,662	$ 3,408,002	$ 1,270,455
Operating Expenses				
Operation and Maintenance	$ 27,110,755	$ 25,510,891	$ 1,488,033	$ 111,831
Depreciation & Amortization	$ 9,169,369	$ 8,537,980	$ 600,970	$ 30,419
Taxes Other than Income	$ 1,187,443	$ 1,100,819	$ 81,947	$ 4,676
Operating Expenses Before Income Taxes	$ 37,467,567	$ 35,149,690	$ 2,170,951	$ 146,926
Operating Income Before Income Taxes	$ 22,292,552	$ 19,931,972	$ 1,237,052	$ 1,123,529
State Income Taxes	$ 1,531,757	$ 1,415,611	$ 110,780	$ 5,365
Federal Income Taxes	$ 3,279,160	$ 3,030,517	$ 237,156	$ 11,486
Utility Operating Income	$ 17,481,636	$ 15,485,844	$ 889,115	$ 1,106,677
Rate Base	$ 223,705,282	$ 206,742,809	$ 16,178,879	$ 783,595
Rate of Return	7.81%	7.49%	5.50%	141.23%
Total Fire			11.77%	

Tidewater Utilities			Total System							
Functionalization of Expenses	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants	
O&M Expenses										
Source of Supply Expense										
(600) Operation Supervision and Engineering	Base / MaxDay	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
(601) Operation Labor and Expenses	Base / MaxDay	-	-	-	-	-	-	-	-	
(602) Purchased Water	Base / MaxDay	981,915	564,895	417,019	-	-	-	-	-	
(603) Miscellaneous Expenses	Base / MaxDay	-	-	-	-	-	-	-	-	
(604) Rents	Base / MaxDay	-	-	-	-	-	-	-	-	
(610) Maintenance Supervision and Engineering	Base / MaxDay	1,775	1,021	754	-	-	-	-	-	
(611) Maintenance of Structures	Base / MaxDay	-	-	-	-	-	-	-	-	
(612) Maintenance of Collecting and Impounding Reservoi	Base / MaxDay	-	-	-	-	-	-	-	-	
(613) Maintenance of Lake, River and Other Intakes	Base / MaxDay	-	-	-	-	-	-	-	-	
(614) Maintenance of Wells and Springs	Base / MaxDay	10,787	6,206	4,581	-	-	-	-	-	
(615) Maintenance of Infiltration Galleries and Tunnels	Base / MaxDay	-	-	-	-	-	-	-	-	
(616) Maintenance of Supply Mains	Base / MaxDay	-	-	-	-	-	-	-	-	
(617) Maintenance of Miscellaneous Water Source Plant	Base / MaxDay	-	-	-	-	-	-	-	-	
Total Source of Supply Expense		**$ 994,477**	**$ 572,122**	**$ 422,354**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
Pumping Expenses										
(620) Operation Supervision and Engineering	Base / MaxDay / PeakHr	$ -	-	-	-	-	-	-	-	
(621) Fuel for Power Production	Base / MaxDay / PeakHr	-	-	-	-	-	-	-	-	
(622) Power Production Labor and Expenses	Base / MaxDay / PeakHr	-	-	-	-	-	-	-	-	
(623) Fuel or Power Purchased for Pumping	Purchased Power	1,023,145	818,516	153,472	51,157	-	-	-	-	
(624) Pumping Labor and Expenses	Base / MaxDay / PeakHr	2,720,391	340,049	250,820	2,129,522	-	-	-	-	
(625) Expenses Transferred - Cr	Base / MaxDay / PeakHr	-	-	-	-	-	-	-	-	
(626) Miscellaneous Expenses	Base / MaxDay / PeakHr	485,763	60,720	44,787	380,255	-	-	-	-	
(627) Rents	Base / MaxDay / PeakHr	-	-	-	-	-	-	-	-	
(630) Maintenance Supervision and Engineering	Base / MaxDay / PeakHr	182,149	22,769	16,794	142,586	-	-	-	-	
(631) Maintenance of Structures	Base / MaxDay / PeakHr	468,640	58,580	43,209	366,851	-	-	-	-	
(632) Maintenance of Power Production Equipment	Base / MaxDay / PeakHr	26,691	3,336	2,461	20,894	-	-	-	-	
(633) Maintenance of Pumping Equipment	Base / MaxDay / PeakHr	45,194	5,649	4,167	35,378	-	-	-	-	
Total Pumping Expenses		**$ 4,951,972**	**$ 1,309,619**	**$ 515,710**	**$ 3,126,643**	**$ -**	**$ -**	**$ -**	**$ -**	
Water Treatment										
(640) Operation Supervision and Engineering	Base / MaxDay	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
(641) Chemicals	Base	1,522,378	1,522,378	-	-	-	-	-	-	
(642) Operation Labor and Expenses	Base / MaxDay	1,466,066	843,427	622,638	-	-	-	-	-	
(643) Miscellaneous Expenses	Base / MaxDay	19,200	11,046	8,154	-	-	-	-	-	
(644) Rents	Base / MaxDay	-	-	-	-	-	-	-	-	
(650) Maintenance Supervision and Engineering	Base / MaxDay	-	-	-	-	-	-	-	-	
(651) Maintenance of Structures	Base / MaxDay	302	173	128	-	-	-	-	-	
(652) Maintenance of Water Treatment Equipment	Base / MaxDay	234,683	135,013	99,670	-	-	-	-	-	
Total Water Treatment Expenses		**$ 3,242,628**	**$ 2,512,038**	**$ 730,590**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
Transmission & Distribution Expense										
(660) Operation Supervision and Engineering	T&D Operation	$ 47,403	5,591	4,124	35,011	-	2,678	-	-	
(661) Storage Facilities Expenses	Distribution Storage	-	-	-	-	-	-	-	-	
(662) Transmission and Distribution Lines Expenses	Base / MaxDay / PeakHr	949,269	118,659	87,523	743,088	-	-	-	-	
(663) Meter Expenses	Meters	56,841	-	-	-	-	56,841	-	-	
(665) Miscellaneous Expenses	T&D Operation	(8,688)	(1,025)	(756)	(6,417)	-	(491)	-	-	
(670) Maintenance Supervision and Engineering	T&D Maintenance	321,583	19,025	16,820	123,667	-	-	49,120	112,951	
(671) Maintenance Structures	Base / MaxDay / PeakHr	71,423	8,928	6,585	55,910	-	-	-	-	
(672) Maintenance of Distribution Reservoirs and Standpip	Distribution Storage	71,124	7,112	10,669	53,343	-	-	-	-	
(673) Maintenance of Transmission and Distribution Mains	Base / MaxDay / PeakHr	167,792	20,974	15,470	131,348	-	-	-	-	
(674) Maintenance of Fire Mains	Hydrants	-	-	-	-	-	-	-	-	
(675) Maintenance of Services	Services	95,565	-	-	-	-	-	95,565	-	
(676) Maintenance of Meters	Meters	-	-	-	-	-	-	-	-	
(677) Maintenance of Hydrants	Hydrants	219,753	-	-	-	-	-	-	219,753	
(678) Maintenance of Miscellaneous Plant	T&D Maintenance	-	-	-	-	-	-	-	-	
Total T&D Expense		**$ 1,992,065**	**$ 179,264**	**$ 140,435**	**$ 1,135,949**	**$ -**	**$ 59,029**	**$ 144,685**	**$ 332,704**	

Tidewater Utilities			Total System						
Functionalization of Expenses	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
Customer Accounts									
(901) Supervision	Commercial	$ -	-	-	-	-	-	-	-
(902) Meter Reading Expenses	Meters	611,806	-	-	-	-	611,806	-	-
(903) Customer Records and Collection Expenses	Commercial	2,258,914	-	-	-	2,258,914	-	-	-
(904) Uncollectible Accounts	Commercial	107,604	-	-	-	107,604	-	-	-
Total Customer Accounts		**$ 2,978,325**	**$ -**	**$ -**	**$ -**	**$ 2,366,518**	**$ 611,806**	**$ -**	**$ -**
Administrative & General Expense									
(920) Administrative and General Salaries	O&M Non-Var	$ 1,845,113	289,340	214,950	730,864	410,692	116,419	25,109	57,738
(921) Office Supplies and Other Expenses	O&M Non-Var	983,153	154,172	114,534	389,435	218,834	62,033	13,379	30,765
(922) Administrative Expenses Transferred - Cr	O&M Non-Var	-	-	-	-	-	-	-	-
(923) Outside Services Employed	O&M Non-Var	5,642,039	884,752	657,280	2,234,859	1,255,827	355,988	76,779	176,554
(924) Property Insurance	Net Plant	983,755	121,893	93,970	549,447	-	36,684	125,705	56,057
(927) Franchise Requirements	O&M Non-Var	-	-	-	-	-	-	-	-
(928) Regulatory Commission Expenses	O&M Non-Var	311,297	48,816	36,265	123,307	69,290	19,641	4,236	9,741
(929) Duplicate Charges - Cr	O&M Non-Var	-	-	-	-	-	-	-	-
(930) Miscellaneous General Expenses	O&M Non-Var	221,235	34,693	25,773	87,633	49,243	13,959	3,011	6,923
(931) Rents	O&M Non-Var	524,973	82,323	61,158	207,946	116,851	33,124	7,144	16,428
(932) Maintenance of General Plant	O&M Non-Var	288,796	45,287	33,644	114,395	64,281	18,222	3,930	9,037
(925) Injuries and Damages	Labor	-	-	-	-	-	-	-	-
(926) Employee Pensions and Benefits	Labor	2,137,084	335,643	248,779	1,002,579	263,864	184,874	28,992	72,353
Total A&G Expense		**$ 12,937,445**	**$ 1,996,921**	**$ 1,486,352**	**$ 5,440,465**	**$ 2,448,883**	**$ 840,944**	**$ 288,285**	**$ 435,596**
Interest on Customer Deposits	Commercial	13,844	-	-	-	13,844	-	-	-
Total O&M Expense w/o ERP		**$ 27,110,755**	**$ 6,569,964**	**$ 3,295,441**	**$ 9,703,057**	**$ 4,829,245**	**$ 1,511,779**	**$ 432,970**	**$ 768,300**
Allocation of ERP	OpExp		-	-	-	-	-	-	-
Total O&M Expense w/ ERP		**$ 27,110,755**	**$ 6,569,964**	**$ 3,295,441**	**$ 9,703,057**	**$ 4,829,245**	**$ 1,511,779**	**$ 432,970**	**$ 768,300**

Tidewater Utilities			Total System							
Functionalization of Expenses	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants	
Depreciation										
Source of Supply										
314.000 Wells & Springs	Base / MaxDay	$ 190,452	$ 109,567	$ 80,885	$ -	$ -	$ -	$ -	$ -	
316.000 Supply Mains	Base / MaxDay	4,708	2,709	2,000	-	-	-	-	-	
Total Source of Supply		**$ 195,160**	**$ 112,276**	**$ 82,885**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
Pumping Plant										
321.000 Structures and Improvements	Base / MaxDay / PeakHr	$ 548,070	$ 68,509	$ 50,532	$ 429,029	$ -	$ -	$ -	$ -	
323.000 Other Power Production Equipment	Base / MaxDay / PeakHr	24,154	3,019	2,227	18,908	-	-	-	-	
325.000 Electric Pumping Equipment	Base / MaxDay / PeakHr	1,987,951	248,494	183,289	1,556,168	-	-	-	-	
326.000 Diesel Pumping Equipment	Base / MaxDay / PeakHr	-	-	-	-	-	-	-	-	
328.000 Other Pumping Equipment	Base / MaxDay / PeakHr	114	14	11	89	-	-	-	-	
Total Water Pumping		**$ 2,560,289**	**$ 320,036**	**$ 236,059**	**$ 2,004,195**	**$ -**	**$ -**	**$ -**	**$ -**	
Water Treatment										
331.000 Structures - Water Treatment	Base / MaxDay	$ 4,462	$ 2,567	$ 1,895	$ -	$ -	$ -	$ -	$ -	
332.000 Water Treatment Equipment	Base / MaxDay	641,484	369,046	272,438	-	-	-	-	-	
Total Water Treatment		**$ 645,946**	**$ 371,613**	**$ 274,333**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
Trans & Dist Plant										
342.000 Reservoirs and Standpipes	Distribution Storage	$ 422,017	$ 42,202	$ 63,303	$ 316,513	$ -	$ -	$ -	$ -	
343.000 Transmission and Distribution Mains	Base / MaxDay / PeakHr	2,319,581	289,948	213,865	1,815,768	-	-	-	-	
345.000 Services	Services	922,799	-	-	-	-	-	922,799	-	
346.000 Meters	Meters	1,110,076	-	-	-	-	1,110,076	-	-	
347.000 Meter Installations	Meters	229,518	-	-	-	-	229,518	-	-	
348.000 Fire Hydrants	Hydrants	414,145	-	-	-	-	-	-	414,145	
Total Transmission & Distribution		**$ 5,418,137**	**$ 332,149**	**$ 277,168**	**$ 2,132,281**	**$ -**	**$ 1,339,594**	**$ 922,799**	**$ 414,145**	
General Plant										
390.000 Structures and Improvements	UPIS	$ 12,146	$ 1,525	$ 1,175	$ 6,579	$ -	$ 571	$ 1,624	$ 672	
391.000 Office Furniture & Equipment	UPIS	278,087	34,918	26,909	150,632	-	13,062	37,184	15,382	
392.000 Transportation Equipment	UPIS	929,184	116,672	89,912	503,315	-	43,644	124,243	51,397	
394.000 Tools, Shop and Garage Equipment	UPIS	185,720	23,320	17,971	100,600	-	8,723	24,833	10,273	
395.000 Lab Equipment	Base	41,975	41,975	-	-	-	-	-	-	
396.000 Power Operated Equipment	UPIS	75,965	9,538	7,351	41,149	-	3,568	10,158	4,202	
397.000 Communication Equipment	UPIS	7,656	961	741	4,147	-	360	1,024	423	
398.000 Other Tangible Equipment	UPIS	2,221	279	215	1,203	-	104	297	123	
Total General Plant		**$ 1,532,953**	**$ 229,187**	**$ 144,274**	**$ 807,625**	**$ -**	**$ 70,032**	**$ 199,362**	**$ 82,473**	
Depreciation Expense		**$ 10,352,485**	**$ 1,365,261**	**$ 1,014,718**	**$ 4,944,100**	**$ -**	**$ 1,409,627**	**$ 1,122,162**	**$ 496,617**	

Tidewater Utilities			Total System							
Functionalization of Expenses	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
Enterprise Resource Planning (ERP)	OpExp	448,308	108,642	54,494	160,451	79,857	24,999	7,160	12,705
Acquisition Amortzation	UPIS	113,004	14,189	10,935	61,212	-	5,308	15,110	6,251
Net Salvage Normalization (5 Year Average)	UPIS	(88,335)	(11,092)	(8,548)	(47,849)	-	(4,149)	(11,812)	(4,886)
Contributions in Aid of Construction (CIAC)									
Wells & Springs	Base / MaxDay	$ (5,305)	$ (3,052)	$ (2,253)	$ -	$ -	$ -	$ -	$ -
Structures and Improvements	Base / MaxDay / PeakHr	(40,071)	(5,009)	(3,695)	(31,368)	-	-	-	-
Water Treatment Eq.	Base / MaxDay	(2,622)	(1,509)	(1,114)	-	-	-	-	-
Dist. Reservoirs & Standpipes	Distribution Storage	(17,640)	(1,764)	(2,646)	(13,230)	-	-	-	-
Trans. & Dist. Mains	Base / MaxDay / PeakHr	(1,401,726)	(175,216)	(129,239)	(1,097,271)	-	-	-	-
Services	Services	(6,560)	-	-	-	-	-	(6,560)	-
Hydrants	Hydrants	(182,169)	-	-	-	-	-	-	(182,169)
Total Contributions in Aid of Construction		$ (1,656,094)	$ (186,549)	$ (138,947)	$ (1,141,869)	$ -	$ -	$ (6,560)	$ (182,169)
Total Depreciation and Amortization Expense		**$ 9,169,369**	**$ 1,290,452**	**$ 932,652**	**$ 3,976,045**	**$ 79,857**	**$ 1,435,784**	**$ 1,126,060**	**$ 328,517**
Taxes									
Payroll Taxes	Labor	$ 641,596	$ 100,767	$ 74,688	$ 300,994	$ 79,217	$ 55,503	$ 8,704	$ 21,722
Real Estate Taxes	Rate Base	290,368	38,212	29,709	131,334	1,004	17,896	60,147	12,066
Other Taxes	Rate Base	16,438	2,163	1,682	7,435	57	1,013	3,405	683
PSC Assessment	Rate Base	239,041	31,458	24,457	108,118	826	14,733	49,515	9,933
State Income	Rate Base	1,531,757	201,579	156,722	692,814	5,295	94,405	317,290	63,652
Federal Income	Rate Base	3,279,160	431,537	335,507	1,483,165	11,335	202,101	679,249	136,266
Total Taxes		**$ 5,998,360**	**$ 805,717**	**$ 622,765**	**$ 2,723,861**	**$ 97,734**	**$ 385,651**	**$ 1,118,310**	**$ 244,323**
Total Expenses		**$ 42,278,484**	**$ 8,666,132**	**$ 4,850,858**	**$ 16,402,962**	**$ 5,006,836**	**$ 3,333,214**	**$ 2,677,340**	**$ 1,341,141**

Tidewater Utilities			Total System						
Functionalization of Expenses	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
Deductions from Revenue Required									
Connection Fees	RevReq	-	-	-	-	-	-	-	-
Other Operating Revenues	RevReq	526,089	96,544	58,450	214,009	44,609	38,828	55,448	18,202
Total O&M Expense		$ 27,110,755	$ 6,569,964	$ 3,295,441	$ 9,703,057	$ 4,829,245	$ 1,511,779	$ 432,970	$ 768,300
% Functional Factor		100.00%	24.23%	12.16%	35.79%	17.81%	5.58%	1.60%	2.83%
Depreciation Expenses		$ 9,169,369	$ 1,290,452	$ 932,652	$ 3,976,045	$ 79,857	$ 1,435,784	$ 1,126,060	$ 328,517
% Functional Factor		100.00%	14.07%	10.17%	43.36%	0.87%	15.66%	12.28%	3.58%
Total O&M Expense excl. Power, Chemical, Purch. Water		$ 10,632,029	$ 1,667,254	$ 1,238,598	$ 4,211,435	$ 2,366,518	$ 670,835	$ 144,685	$ 332,704
% Functional Factor		100.00%	15.68%	11.65%	39.61%	22.26%	6.31%	1.36%	3.13%
Other T&D		$ 1,053,513	$ 124,249	$ 91,646	$ 778,098	$ -	$ 59,519	$ -	$ -
% Functional Factor		100.00%	11.79%	8.70%	73.86%	0.00%	5.65%	0.00%	0.00%
Labor		$ 11,605,184	$ 1,822,672	$ 1,350,963	$ 5,444,388	$ 1,432,884	$ 1,003,939	$ 157,435	$ 392,903
% Functional Factor		100.00%	15.71%	11.64%	46.91%	12.35%	8.65%	1.36%	3.39%
T&D Operation		$ 1,006,110	$ 118,659	$ 87,523	$ 743,088	$ -	$ 56,841	$ -	$ -
% Functional Factor		100.00%	11.79%	8.70%	73.86%	0.00%	5.65%	0.00%	0.00%
T&D Maintenance		$ 625,657	$ 37,014	$ 32,724	$ 240,600	$ -	$ -	$ 95,565	$ 219,753
% Functional Factor		100.00%	5.92%	5.23%	38.46%	0.00%	0.00%	15.27%	35.12%

Tidewater Utilities			Total System						
Functionalization of Rate Base	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
Net Utility Plant									
Source of Supply									
310.000 Land	Base / MaxDay	$ 610,682	$ 351,325	$ 259,357	$ -	$ -	$ -	$ -	$ -
314.000 Wells	Base / MaxDay	9,884,268	5,686,420	4,197,849	-	-	-	-	-
316.000 Supply Mains	Base / MaxDay	631,010	363,020	267,990	-	-	-	-	-
Total Source of Supply		**$ 11,125,960**	**$ 6,400,765**	**$ 4,725,195**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Water Pumping									
320.000 Land	Base / MaxDay / PeakHr	$ 126,723	$ 15,840	$ 11,684	$ 99,199	$ -	$ -	$ -	$ -
321.000 Structures	Base / MaxDay / PeakHr	19,875,861	2,484,483	1,832,554	15,558,824	-	-	-	-
323.000 Other Power Production Equipment	Base / MaxDay / PeakHr	890,271	111,284	82,083	696,904	-	-	-	-
325.000 Electric Pumping Equipment	Base / MaxDay / PeakHr	49,511,972	6,188,997	4,565,004	38,757,972	-	-	-	-
326.000 Diesel Pumping Equipment	Base / MaxDay / PeakHr	2,673	334	246	2,093	-	-	-	-
328.000 Other Pumping Equipment	Base / MaxDay / PeakHr	5,534	692	510	4,332	-	-	-	-
Total Water Pumping		**$ 70,413,035**	**$ 8,801,629**	**$ 6,492,082**	**$ 55,119,324**	**$ -**	**$ -**	**$ -**	**$ -**
Water Treatment									
331.000 Structures	Base / MaxDay	$ 168,861	$ 97,146	$ 71,715	$ -	$ -	$ -	$ -	$ -
332.000 Water Treatment Equipment	Base / MaxDay	18,480,985	10,632,111	7,848,874	-	-	-	-	-
Total Water Treatment		**$ 18,649,846**	**$ 10,729,257**	**$ 7,920,590**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Transmission & Distribution									
340.000 Land and Land Rights	Distribution Storage	$ 2,482	$ 248	$ 372	$ 1,862	$ -	$ -	$ -	$ -
342.000 Reservoirs and Standpipes	Distribution Storage	27,602,996	2,760,300	4,140,449	20,702,247	-	-	-	-
343.000 Transmission and Distribution Mains	Base / MaxDay / PeakHr	204,321,610	25,540,201	18,838,452	159,942,956	-	-	-	-
345.000 Services	Services	58,198,999	-	-	-	-	-	58,198,999	-
346.000 Meters	Meters	16,720,508	-	-	-	-	16,720,508	-	-
347.000 Meter Installations	Meters	3,723,751	-	-	-	-	3,723,751	-	-
348.000 Fire Hydrantss	Hydrants	24,075,900	-	-	-	-	-	-	24,075,900
Total Transmission & Distribution		**$ 334,646,247**	**$ 28,300,749**	**$ 22,979,274**	**$ 180,647,065**	**$ -**	**$ 20,444,260**	**$ 58,198,999**	**$ 24,075,900**

Tidewater Utilities			Total System						
Functionalization of Rate Base	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
Intangible & General Plant									
301.000 Organization	UPIS	$ 9,079	$ 1,140	$ 879	$ 4,918	$ -	$ 426	$ 1,214	$ 502
302.000 Franchies & Consents	UPIS	1,048,400	131,641	101,448	567,891	-	49,244	140,184	57,992
303.000 Misc. Intangible Plant	UPIS	6,958	874	673	3,769	-	327	930	385
389.000 General Land	UPIS	38,295	4,808	3,706	20,744	-	1,799	5,121	2,118
390.000 Structures and Improvements	UPIS	501,430	62,961	48,520	271,612	-	23,553	67,047	27,736
391.000 Office Furniture & Equipment	UPIS	1,639,232	205,828	158,619	887,930	-	76,996	219,186	90,673
392.000 Transportation Equipment	UPIS	9,886,955	1,241,441	956,705	5,355,510	-	464,398	1,322,009	546,892
394.000 Tools, Shop and Garage Equipment	UPIS	1,857,196	233,196	179,710	1,005,996	-	87,234	248,330	102,730
395.000 Lab Equipment	Base	419,749	419,749	-	-	-	-	-	-
396.000 Power Operated Equipment	UPIS	1,827,980	229,528	176,883	990,170	-	85,862	244,424	101,114
397.000 Communication Equipment	UPIS	114,840	14,420	11,112	62,206	-	5,394	15,356	6,352
398.000 Other Tangible Equipment	UPIS	33,317	4,183	3,224	18,047	-	1,565	4,455	1,843
Total General Plant		**$ 17,383,431**	**$ 2,549,770**	**$ 1,641,479**	**$ 9,188,792**	**$ -**	**$ 796,797**	**$ 2,268,256**	**$ 938,337**
Enterprise Resource Planning (ERP)	OpExp	8,105,125	1,964,179	985,216	2,900,859	1,443,768	451,967	129,442	229,694
Utility Plant		**$ 460,323,645**	**$ 58,746,349**	**$ 44,743,837**	**$ 247,856,039**	**$ 1,443,768**	**$ 21,693,024**	**$ 60,596,697**	**$ 25,243,932**

Tidewater Utilities			Total System						
Functionalization of Rate Base	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
Accumulated Depreciation									
Source of Supply									
314.000 Wells	Base / MaxDay	$ (1,985,100)	$ (1,142,028)	$ (843,072)	$ -	$ -	$ -	$ -	$ -
316.000 Supply Mains	Base / MaxDay	(282,675)	(162,623)	(120,052)	-	-	-	-	-
Total Source of Supply		**$ (2,267,775)**	**$ (1,304,651)**	**$ (963,124)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Water Pumping									
321.000 Structures and Improvements	Base / MaxDay / PeakHr	$ (5,971,253)	$ (746,407)	$ (550,550)	$ (4,674,297)	$ -	$ -	$ -	$ -
323.000 Other Power Production Equipment	Base / MaxDay / PeakHr	(694,249)	(86,781)	(64,010)	(543,458)	-	-	-	-
325.000 Electric Pumping Equipment	Base / MaxDay / PeakHr	(14,449,884)	(1,806,235)	(1,332,279)	(11,311,369)	-	-	-	-
326.000 Diesel Pumping Equipment	Base / MaxDay / PeakHr	(2,673)	(334)	(246)	(2,093)	-	-	-	-
328.000 Other Pumping Equipment	Base / MaxDay / PeakHr	(3,634)	(454)	(335)	(2,845)	-	-	-	-
Total Water Pumping		**$ (21,121,693)**	**$ (2,640,212)**	**$ (1,947,420)**	**$ (16,534,062)**	**$ -**	**$ -**	**$ -**	**$ -**
Water Treatment									
331.000 Structures and Improvements	Base / MaxDay	$ (5,850)	$ (3,366)	$ (2,484)	$ -	$ -	$ -	$ -	$ -
332.000 Water Treatment Equipment	Base / MaxDay	(5,195,451)	(2,988,943)	(2,206,508)	-	-	-	-	-
Total Water Treatment		**$ (5,201,301)**	**$ (2,992,309)**	**$ (2,208,993)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Transmission & Distribution									
342.000 Reservoirs and Standpipes	Distribution Storage	$ (5,317,823)	$ (531,782)	$ (797,673)	$ (3,988,367)	$ -	$ -	$ -	$ -
343.000 Transmission and Distribution Mains	Base / MaxDay / PeakHr	(13,734,235)	(1,716,779)	(1,266,296)	(10,751,159)	-	-	-	-
345.000 Services	Services	(11,509,661)	-	-	-	-	-	(11,509,661)	-
346.000 Meters	Meters	(6,202,149)	-	-	-	-	(6,202,149)	-	-
347.000 Meter Installations	Meters	(694,544)	-	-	-	-	(694,544)	-	-
348.000 Fire Hydrants	Hydrants	(3,213,272)	-	-	-	-	-	-	(3,213,272)
Total Transmission & Distribution		**$ (40,671,684)**	**$ (2,248,562)**	**$ (2,063,970)**	**$ (14,739,526)**	**$ -**	**$ (6,896,693)**	**$ (11,509,661)**	**$ (3,213,272)**

Tidewater Utilities			Total System						
Functionalization of Rate Base	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
General Plant									
390.000 Structures and Improvements	UPIS	$ (197,871)	$ (24,845)	$ (19,147)	$ (107,182)	$ -	$ (9,294)	$ (26,458)	$ (10,945)
391.000 Office Furniture & Equipment	UPIS	(316,843)	(39,784)	(30,659)	(171,626)	-	(14,882)	(42,366)	(17,526)
392.000 Transportation Equipment	UPIS	(4,951,504)	(621,728)	(479,129)	(2,682,103)	-	(232,576)	(662,078)	(273,890)
394.000 Tools, Shop and Garage Equipment	UPIS	(833,800)	(104,695)	(80,682)	(451,648)	-	(39,164)	(111,489)	(46,121)
395.000 Lab Equipment	Base	(152,798)	(152,798)	-	-	-	-	-	-
396.000 Power Operated Equipment	UPIS	(778,689)	(97,775)	(75,349)	(421,796)	-	(36,576)	(104,120)	(43,073)
397.000 Communication Equipment	UPIS	(120,582)	(15,141)	(11,668)	(65,316)	-	(5,664)	(16,123)	(6,670)
398.000 Other Tangible Equipment	UPIS	(15,604)	(1,959)	(1,510)	(8,452)	-	(733)	(2,086)	(863)
Total General Plant		**$ (7,367,690)**	**$ (1,058,726)**	**$ (698,144)**	**$ (3,908,122)**	**$ -**	**$ (338,889)**	**$ (964,721)**	**$ (399,088)**
Enterprise Resource Planning (ERP)	OpExp	(5,708,004)	(1,383,266)	(693,835)	(2,042,919)	(1,016,768)	(318,296)	(91,159)	(161,761)
Accumulated Depreciation		**$ (82,338,148)**	**$ (11,627,724)**	**$ (8,575,486)**	**$ (37,224,629)**	**$ (1,016,768)**	**$ (7,553,878)**	**$ (12,565,542)**	**$ (3,774,121)**
Net Utility Plant		**$ 377,985,497**	**$ 47,118,624**	**$ 36,168,351**	**$ 210,631,410**	**$ 427,000**	**$ 14,139,146**	**$ 48,031,156**	**$ 21,469,811**

Tidewater Utilities			Total System						
Functionalization of Rate Base	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
Other Additions / Reductions									
Materials and Supplies	UPIS	$ 281,484	$ 35,344	$ 27,238	$ 152,473	$ -	$ 13,222	$ 37,638	$ 15,570
Cash Working Capital	OpExp	1,943,979	471,100	236,300	695,758	346,281	108,402	31,046	55,091
Deferred Regulatory Liabilities (Protected Property-Relate	UPIS	(3,010,863)	(378,055)	(291,344)	(1,630,907)	-	(141,423)	(402,590)	(166,544)
Deferred FIT	UPIS	(7,884,577)	(990,016)	(762,946)	(4,270,873)	-	(370,345)	(1,054,266)	(436,131)
Prepayment	UPIS	817,251	102,617	79,081	442,684	-	38,387	109,277	45,206
Total Other Additions / Reductions		**$ (7,852,726)**	**$ (759,009)**	**$ (711,672)**	**$ (4,610,866)**	**$ 346,281**	**$ (351,757)**	**$ (1,278,895)**	**$ (486,809)**
Contributions in Aid of Construction (CIAC)									
Wells & Springs	Base / MaxDay	$ (275,341)	$ (158,404)	$ (116,937)	$ -	$ -	$ -	$ -	$ -
Structures and Improvements	Base / MaxDay / PeakHr	(1,453,187)	(181,648)	(133,984)	(1,137,555)	-	-	-	-
Water Treatment Eq.	Base / MaxDay	(75,547)	(43,462)	(32,085)	-	-	-	-	-
Dist. Reservoirs & Standpipes	Distribution Storage	(1,153,794)	(115,379)	(173,069)	(865,345)	-	-	-	-
Trans. & Dist. Mains	Base / MaxDay / PeakHr	(131,369,023)	(16,421,128)	(12,112,224)	(102,835,671)	-	-	-	-
Services	Services	(413,709)	-	-	-	-	-	(413,709)	-
Hydrants	Hydrants	(11,686,889)	-	-	-	-	-	-	(11,686,889)
Total Contributions in Aid of Construction		**$ (146,427,489)**	**$ (16,920,021)**	**$ (12,568,299)**	**$ (104,838,571)**	**$ -**	**$ -**	**$ (413,709)**	**$ (11,686,889)**
TOTAL RATE BASE		**$ 223,705,282**	**$ 29,439,594**	**$ 22,888,380**	**$ 101,181,974**	**$ 773,281**	**$ 13,787,390**	**$ 46,338,551**	**$ 9,296,113**

Tidewater Utilities		Total System							
Functionalization of Rate Base	Functional Factor	Test Year Period	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
		$ -							
Net Plant Factor		$ 375,588,377	$ 46,537,711	$ 35,876,970	$ 209,773,470	$ -	$ 14,005,475	$ 47,992,872	$ 21,401,878
%		100%	12.39%	9.55%	55.85%	0.00%	3.73%	12.78%	5.70%
Total Plant Factor		$ 460,323,645	$ 58,746,349	$ 44,743,837	$ 247,856,039	$ 1,443,768	$ 21,693,024	$ 60,596,697	$ 25,243,932
%		100%	12.76%	9.72%	53.84%	0.31%	4.71%	13.16%	5.48%
Rate Base Factor		$ 223,705,282	$ 29,439,594	$ 22,888,380	$ 101,181,974	$ 773,281	$ 13,787,390	$ 46,338,551	$ 9,296,113
%		100.00%	13.16%	10.23%	45.23%	0.35%	6.16%	20.71%	4.16%
Utility Plant excl. GenPlant		$ 435,254,838	$ 54,652,149	$ 42,117,141	$ 235,766,388	$ -	$ 20,444,260	$ 58,198,999	$ 24,075,900
%		100.00%	12.56%	9.68%	54.17%	0.00%	4.70%	13.37%	5.53%
A/D excl. GenPlant		$ (69,415,251)	$ (9,338,531)	$ (7,183,507)	$ (31,273,588)	$ -	$ (6,896,693)	$ (11,509,661)	$ (3,213,272)
%		100.00%	13.45%	10.35%	45.05%	0.00%	9.94%	16.58%	4.63%
Rate of Return		7.81%	7.81%	7.81%	7.81%	7.81%	7.81%	7.81%	7.81%
Required Return		$ 17,481,673	$ 2,300,586	$ 1,788,635	$ 7,906,967	$ 60,429	$ 1,077,429	$ 3,621,172	$ 726,454
Total Expenses		$ 42,278,484	$ 8,666,132	$ 4,850,858	$ 16,402,962	$ 5,006,836	$ 3,333,214	$ 2,677,340	$ 1,341,141
Revenue Requirement		$ 59,760,157	$ 10,966,719	$ 6,639,494	$ 24,309,929	$ 5,067,265	$ 4,410,643	$ 6,298,512	$ 2,067,595
%		100.00%	18.35%	11.11%	40.68%	8.48%	7.38%	10.54%	3.46%

Tidewater Utilities Functional Allocators	Total	Base	Maximum Day	Peak Hour	Customer Commercial	Customer Meters	Customer Services	Hydrants
External Allocators								
External Allocators								
Base	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Base / MaxDay	100.00%	57.53%	42.47%	0.00%	0.00%	0.00%	0.00%	0.00%
Base / Peak Hour	100.00%	12.50%	0.00%	87.50%	0.00%	0.00%	0.00%	0.00%
Base / MaxDay / PeakHr	100.00%	12.50%	9.22%	78.28%	0.00%	0.00%	0.00%	0.00%
Commercial	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%
Peak Hour	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
Meters	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
Services	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
Hydrants	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

Supporting Data - External Factors

Base-Capacity Allocators	Base	Maximum Day	Peak Hour	MGD Ratios
Base	1.00			1.00
Max Day		1.74		1.74
Peak Hour			8.00	8.00
Base / MaxDay %	57.53%	42.47%		
Base / Peak Hour %	12.50%		87.50%	
Base / MaxDay / PeakHr %	12.50%	9.22%	78.28%	

Internal Allocators								
System								
RevReq	100.00%	18.35%	11.11%	40.68%	8.48%	7.38%	10.54%	3.46%
Rate Base	100.00%	13.16%	10.23%	45.23%	0.35%	6.16%	20.71%	4.16%
Net Plant	100.00%	12.39%	9.55%	55.85%	0.00%	3.73%	12.78%	5.70%
UPIS	100.00%	12.56%	9.68%	54.17%	0.00%	4.70%	13.37%	5.53%
A/D	100.00%	13.45%	10.35%	45.05%	0.00%	9.94%	16.58%	4.63%
Purchased Power	100.00%	80.00%	15.00%	5.00%	0.00%	0.00%	0.00%	0.00%
Distribution Storage	100.00%	10.00%	15.00%	75.00%	0.00%	0.00%	0.00%	0.00%
Other T&D	100.00%	11.79%	8.70%	73.86%	0.00%	5.65%	0.00%	0.00%
Labor	100.00%	15.71%	11.64%	46.91%	12.35%	8.65%	1.36%	3.39%
O&M Non-Var	100.00%	15.68%	11.65%	39.61%	22.26%	6.31%	1.36%	3.13%
T&D Operation	100.00%	11.79%	8.70%	73.86%	0.00%	5.65%	0.00%	0.00%
T&D Maintenance	100.00%	5.92%	5.23%	38.46%	0.00%	0.00%	15.27%	35.12%
OpExp	100.00%	24.23%	12.16%	35.79%	17.81%	5.58%	1.60%	2.83%
DepExp	100.00%	14.07%	10.17%	43.36%	0.87%	15.66%	12.28%	3.58%

Tidewater Utilities Allocation of Costs related to Retail	Allocated to Retail Only	General Water	Public Fire	Private Fire
Rate Base				
Total Rate Base				
Base	$ 29,439,594	$ 29,145,198	$ 266,723	$ 27,673
Maximum Day	22,888,380	22,297,277	535,540	55,564
Peak Hour	101,181,974	94,470,601	6,080,503	630,869
Bills/Comm'l	773,281	767,426	-	5,855
Meters	13,787,390	13,787,390	-	-
Services	46,338,551	46,274,917	-	63,634
Hydrants	9,296,113	-	9,296,113	-
Total Total Rate Base	**$ 223,705,282**	**$ 206,742,809**	**$ 16,178,879**	**$ 783,595**
Required Income				
Base	$ 2,300,586	$ 2,277,581	$ 20,843	$ 2,163
Maximum Day	1,788,635	1,742,443	41,850	4,342
Peak Hour	7,906,967	7,382,500	475,167	49,300
Bills/Comm'l	60,429	59,971	-	458
Meters	1,077,429	1,077,429	-	-
Services	3,621,172	3,616,200	-	4,973
Hydrants	726,454	-	726,454	-
Total Required Income	**$ 17,481,673**	**$ 16,156,124**	**$ 1,264,315**	**$ 61,235**

Tidewater Utilities Allocation of Costs related to Retail	Allocated to Retail Only	General Water	Public Fire	Private Fire
Expenses				
Operation & Maintenance				
Base	$ 6,569,964	$ 6,504,265	$ 59,524	$ 6,176
Maximum Day	3,295,441	3,210,335	77,106	8,000
Peak Hour	9,703,057	9,059,456	583,103	60,499
Bills/Comm'l	4,829,245	4,792,682	-	36,562
Meters	1,511,779	1,511,779	-	-
Services	432,970	432,375	-	595
Hydrants	768,300	-	768,300	-
Total Operation & Maintenance	**$ 27,110,755**	**$ 25,510,891**	**$ 1,488,033**	**$ 111,831**
Depreciation				
Base	$ 1,290,452	$ 1,277,547	$ 11,691	$ 1,213
Maximum Day	932,652	908,566	21,822	2,264
Peak Hour	3,976,045	3,712,315	238,939	24,791
Bills/Comm'l	79,857	79,253	-	605
Meters	1,435,784	1,435,784	-	-
Services	1,126,060	1,124,514	-	1,546
Hydrants	328,517	-	328,517	-
Total Depreciation	**$ 9,169,369**	**$ 8,537,980**	**$ 600,970**	**$ 30,419**
Taxes Other Than Income				
Base	$ 172,600	$ 170,874	$ 1,564	$ 162
Maximum Day	130,537	127,165	3,054	317
Peak Hour	547,881	511,541	32,925	3,416
Bills/Comm'l	81,104	80,490	-	614
Meters	89,145	89,145	-	-
Services	121,771	121,604	-	167
Hydrants	44,405	-	44,405	-
Total Taxes Other Than Income	**$ 1,187,443**	**$ 1,100,819**	**$ 81,947**	**$ 4,676**

Tidewater Utilities Allocation of Costs related to Retail	Allocated to Retail Only	General Water	Public Fire	Private Fire
Income Taxes				
Base	$ 633,116	$ 626,785	$ 5,736	$ 595
Maximum Day	492,228	479,516	11,517	1,195
Peak Hour	2,175,979	2,031,647	130,765	13,567
Bills/Comm'l	16,630	16,504	-	126
Meters	296,506	296,506	-	-
Services	996,538	995,170	-	1,368
Hydrants	199,918	-	199,918	-
Total Income Taxes	**$ 4,810,917**	**$ 4,446,128**	**$ 347,937**	**$ 16,852**
Total Expenses				
Base	$ 8,666,132	$ 8,579,471	$ 78,515	$ 8,146
Maximum Day	4,850,858	4,725,583	113,500	11,776
Peak Hour	16,402,962	15,314,959	985,732	102,272
Bills/Comm'l	5,006,836	4,968,929	-	37,907
Meters	3,333,214	3,333,214	-	-
Services	2,677,340	2,673,663	-	3,677
Hydrants	1,341,141	-	1,341,141	-
Total Total Expenses	**$ 42,278,484**	**$ 39,595,818**	**$ 2,518,887**	**$ 163,778**

Tidewater Utilities Allocation of Costs related to Retail	Allocated to Retail Only	General Water	Public Fire	Private Fire
Less: Deductions				
Base	$ 96,544	$ 95,578	$ 875	$ 91
Maximum Day	58,450	56,940	1,368	142
Peak Hour	214,009	199,813	12,861	1,334
Bills/Comm'l	44,609	44,271	-	338
Meters	38,828	38,828	-	-
Services	55,448	55,372	-	76
Hydrants	18,202	-	18,202	-
Total Other Revenues	**$ 526,089**	**$ 490,803**	**$ 33,305**	**$ 1,981**
Revenue from Sales				
Base	$ 10,870,175	$ 10,761,473	$ 98,484	$ 10,218
Maximum Day	6,581,044	6,411,085	153,983	15,976
Peak Hour	24,095,920	22,497,645	1,448,038	150,238
Bills/Comm'l	5,022,656	4,984,629	-	38,027
Meters	4,371,815	4,371,815	-	-
Services	6,243,065	6,234,491	-	8,573
Hydrants	2,049,393	-	2,049,393	-
Total Revenue from Sales	**$ 59,234,068**	**$ 55,261,139**	**$ 3,749,897**	**$ 223,032**

Tidewater Utilities Class Allocator Summary	Total	General Water	Public Fire	Private Fire
Base	100.00%	99.00%	0.91%	0.09%
Maximum Day	100.00%	97.42%	2.34%	0.24%
Peak Hour	100.00%	93.37%	6.01%	0.62%
Bills/Comm'l	100.00%	99.24%	0.00%	0.76%
Meters	100.00%	100.00%	0.00%	0.00%
Services	100.00%	99.86%	0.00%	0.14%
Hydrants	100.00%	0.00%	100.00%	0.00%

Tidewater Utilities Class Allocator Summary	Total	General Water	Public Fire	Private Fire
Supporting Data				
Base				
Base Consumption (Gallons)	3,355,313	3,321,760	30,399	3,154
Base Consumption (MGD)	9.19	9.10	0.08	0.01
%	**100.00%**	**99.00%**	**0.91%**	**0.09%**
Max Day				
Max Day Ratio		1.74	2.94	2.94
Max Day Consumption (MGD)	16.09	15.82	0.24	0.03
Extra Capacity	6.90	6.72	0.16	0.02
%	**100.00%**	**97.42%**	**2.34%**	**0.24%**
Peak Hour				
Peak Hour Ratio		8.00	46.99	46.99
Peak Hour (MGD)	77.15	72.83	3.91	0.41
Extra Hour Capacity	61.06	57.01	3.67	0.38
%	**100.00%**	**93.37%**	**6.01%**	**0.62%**
Customer Costs				
Number of Bills	761,854	756,086	-	5,768
%	**100.00%**	**99.24%**	**0.00%**	**0.76%**
Meters				
Number of ERCs	69,621	69,621	-	-
%	**100.00%**	**100.00%**	**0.00%**	**0.00%**
Services				
Number of ERCs	63,801	63,713	-	88
%	**100.00%**	**99.86%**	**0.00%**	**0.14%**
Hydrants				
Direct Allocation	1.00		1	
%	**100.00%**	**0.00%**	**100.00%**	**0.00%**

Tidewater Utilities
Rate Comparison

Charge Descriptions:	Bills/Usage	Present Rates	Present Revenue	Proposed Rates	Proposed Revenue	Increase %
Customer Charge (Monthly):						
5/8"	657,042	$ 18.00	$ 11,826,756	$ 24.05	$ 15,801,860	33.61%
3/4"	768	$ 18.00	$ 13,824	$ 24.05	$ 18,470	33.61%
1"	72,420	$ 29.99	$ 2,171,876	$ 40.07	$ 2,901,869	33.61%
1-1/2"	1,812	$ 54.01	$ 97,866	$ 72.17	$ 130,772	33.62%
2"	5,640	$ 84.01	$ 473,816	$ 112.26	$ 633,146	33.63%
3"	714	$ 162.02	$ 115,682	$ 216.49	$ 154,574	33.62%
4"	546	$ 252.04	$ 137,614	$ 336.78	$ 183,882	33.62%
6"	120	$ 492.07	$ 59,048	$ 657.51	$ 78,901	33.62%
8"	60	$ 768.11	$ 46,087	$ 1,026.37	$ 61,582	33.62%
10"	12	$ 1,021.39	$ 12,257	$ 1,364.80	$ 16,378	33.62%
Total Customer Charge	**739,134**		**$ 14,954,826**		**$ 19,981,435**	**33.61%**
Water Charge:						
Residential						
GMS 0-2,000	1,034,495	$ 8.6787	$ 8,978,069	$ 9.9563	$ 10,299,739	14.72%
GMS 2,001-7,000	1,122,448	$ 8.7906	9,866,994	$ 10.0847	11,319,554	14.72%
GMS Over 7,000	701,820	$ 8.9039	6,248,936	$ 10.2147	7,168,882	14.72%
Apartments/Commercial						
All Consumption	283,775	$ 8.9027	$ 2,526,365	$ 10.2133	$ 2,898,281	14.72%
Total Usage Charge	**3,142,538**		**$ 27,620,364**		**$ 31,686,457**	**14.72%**
Total Metered Sales to General Customers			**$ 42,575,191**		**$ 51,667,892**	**21.36%**

Tidewater Utilities
Rate Comparison

Charge Descriptions:	Bills/Usage	Present Rates	Present Revenue	Proposed Rates	Proposed Revenue	Increase %
Fire Protection						
Public Fire	728,838	$ 4.46	$ 3,250,617	$ 4.46	$ 3,250,617	0.00%
Public Fire - DAFB	3,120	$ 11.47	$ 35,786	$ 11.47	$ 35,786	0.00%
Private Fire						
1"	48	$ 8.43	$ 405	$ 8.43	$ 405	0.00%
2"	732	$ 29.57	$ 21,645	$ 29.57	$ 21,645	0.00%
4"	1,644	$ 125.43	$ 206,207	$ 125.43	$ 206,207	0.00%
6"	2,940	$ 280.47	$ 824,582	$ 280.47	$ 824,582	0.00%
8"	396	$ 498.95	$ 197,584	$ 498.95	$ 197,584	0.00%
Private Fire - Ocean View						
6"	24	$ 533.33	$ 12,800	$ 533.33	$ 12,800	0.00%
Total Fire Protection Sales			**$ 4,549,627**		**$ 4,549,627**	**0.00%**
Broadkiln & Wilkerson (Monthly)						
Broadkiln	6,816	$ 39.99	$ 272,572	$ 45.31	$ 308,833	13.30%
Wilkerson						
3/4"	6,732	$ 33.84	$ 227,811	$ 38.34	$ 258,105	13.30%
1"	-	$ 52.30	$ -	$ 59.26	$ -	N/A
Usage Charges						
GMS 0-2,000	16,209	$ 1.2364	$ 20,040	$ 4.6574	$ 75,491	276.69%
GMS 2,001-7,000	13,845	$ 1.2519	17,333	$ 4.7180	65,323	276.87%
GMS Over 7,000	23,009	$ 1.2681	29,178	$ 4.7788	109,955	276.85%
Total B&W			$ 566,934		$ 817,706	44.23%

Tidewater Utilities
Rate Comparison

Charge Descriptions:	Bills/Usage	Present Rates	Present Revenue	Proposed Rates	Proposed Revenue	Increase %
Ocean View (Monthly)						
Ocean View						
5/8"	9,960	$ 35.89	$ 357,431	$ 46.61	$ 464,236	29.88%
3/4"	-	$ 35.89	$ -	$ 46.61	$ -	N/A
1"	108	$ 57.59	$ 6,220	$ 74.81	$ 8,079	29.89%
1-1/2"	24	$ 101.00	$ 2,424	$ 131.19	$ 3,149	29.89%
2"	108	$ 154.42	$ 16,677	$ 200.58	$ 21,663	29.89%
3"	12	$ 295.07	$ 3,541	$ 383.27	$ 4,599	29.89%
4"	-	$ 456.58	$ -	$ 593.06	$ -	N/A
6"	-	$ 888.12	$ -	$ 1,153.59	$ -	N/A
8"	-	$ 1,383.93	$ -	$ 1,797.61	$ -	N/A
Service Availability	1,320	$ 32.55	$ 42,970	$ 42.28	$ 55,810	29.88%
Usage Charges						
GMS 0-2,000	12,943	$ 4.8024	$ 62,158	$ 6.7959	$ 87,961	41.51%
GMS 2,001-7,000	13,998	$ 4.8024	67,222	$ 6.8835	96,352	43.33%
GMS Over 7,000	8,929	$ 4.8024	42,880	$ 6.9723	62,255	45.18%
Total Ocean View			$ 601,524		$ 804,103	33.68%
Total New Service Area			**$ 1,168,458**		**$ 1,621,809**	**38.80%**
Total Revenue From Sales			$ 48,293,275		$ 57,839,327	19.77%
Contract Sales			$ 1,164,514		$ 1,394,703	19.77%
Other Operating Revenues			$ 526,089		$ 526,089	0.00%
Total Revenues			**$ 49,983,878**		**$ 59,760,119**	**19.56%**

Tidewater Utilities
Development Of General Service Rates

Development of Target Revenues	Tide Water (Legacy)	Broadkiln & Wilkerson	Ocean View	Total General Service		
Number of Customers	61,595	1,129	961	63,685		
Current Revenues	**$ 42,575,191**	**$ 566,934**	**$ 601,524**	**$ 43,743,649**		
$ per Customer	**$ 691.22**	**$ 502.16**	**$ 625.94**	**$ 686.88**	10.4%	37.7%
Revenues at Cost-Based Rates	$ 51,540,873	$ 944,721	$ 804,143	$ 53,289,738	<< Adjusted for Fire Revenue Credit	
$ per Customer	$ 836.78	$ 836.78	$ 836.78	$ 836.78		
% Increase at Cost-Based Rates	21.1%	66.6%	33.7%	21.8%		
Revenues at Uniform Increase	$ 51,866,290	$ 690,655	$ 732,794	$ 53,289,738		
$ per Customer	$ 842.06	$ 611.74	$ 762.53	$ 836.78		
% Increase at Uniform Increase	21.8%	21.8%	21.8%	21.8%		
Movement towards Cost-Based Rates		50.00%	100.00%			
Proposed Revenues	$ 51,667,907	$ 817,688	$ 804,143	$ 53,289,738		
Proposed $ per Customer	$ 838.84	$ 724.26	$ 836.78	$ 836.78		
Proposed % Increase	**21.4%**	**44.2%**	**33.7%**	**21.8%**		
Typical Customer Bill Impacts %	18.5%	38.6%	30.4%			

Development of Fixed vs. Variable Charges	Variable	Fixed	Total		
Revenues at Cost-Based Rates					
Base	$ 10,508,088		$ 10,508,088		
Max Day	5,008,106	1,252,026	6,260,132	20.00%	Max Day % Fixed
Peak Hour	17,574,339	4,393,585	21,967,923	20.00%	Peak Hour % Fixed
Bills/Commercial		4,867,263	4,867,263		
Meters		4,268,878	4,268,878		
Services		6,087,696	6,087,696		
Total Revenues at Cost Based	$ 33,090,532	$ 20,869,448	$ 53,959,981		
% Fixed vs. Variable	61.32%	38.68%	100.00%		
Tide Water (Legacy)	**$ 31,684,936**	**$ 19,982,971**	**$ 51,667,907**		
Proposed % Fixed vs. Variable	61.32%	38.68%	100.00%		
Broadkiln & Wilkerson	**$ 250,720**	**$ 566,968**	**$ 817,688**		
Movement towards Variable Charges	50.00%				
Proposed % Fixed vs. Variable	30.66%	69.34%	100.00%		
Ocean View	**$ 246,567**	**$ 557,576**	**$ 804,143**		
Movement towards Variable Charges	50.00%				
Proposed % Fixed vs. Variable	30.66%	69.34%	100.00%		

Tidewater Utilities
Development Of General Service Rates

DEVELOPMENT OF FIXED METER CHARGE

Fixed Charge Revenues	Tide Water (Legacy)	Broadkiln & Wilkerson	Ocean View	Total General
Proposed Fixed Charge Revenues	$ 19,982,971	$ 566,968	$ 557,576	$ 21,107,514
Current Fixed Charge Revenues	14,954,826	500,383	429,264	15,884,473
Increase Required ($)	$ 5,028,145	$ 66,585	$ 128,312	$ 5,223,041
Increase Required (%)	33.62%	13.31%	29.89%	32.88%

		Current		Proposed		
Tide Water (Legacy)	Number of Bills	Fixed Charges	Revenues	Fixed Charges	Revenues	Increase %
Monthly:						
5/8"	657,042	$ 18.00	$ 11,826,756	$ 24.05	$ 15,801,860	33.61%
3/4"	768	$ 18.00	13,824	$ 24.05	18,470	33.61%
1"	72,420	$ 29.99	2,171,876	$ 40.07	2,901,869	33.61%
1-1/2"	1,812	$ 54.01	97,866	$ 72.17	130,772	33.62%
2"	5,640	$ 84.01	473,816	$ 112.26	633,146	33.63%
3"	714	$ 162.02	115,682	$ 216.49	154,574	33.62%
4"	546	$ 252.04	137,614	$ 336.78	183,882	33.62%
6"	120	$ 492.07	59,048	$ 657.51	78,901	33.62%
8"	60	$ 768.11	46,087	$ 1,026.37	61,582	33.62%
10"	12	$ 1,021.39	12,257	$ 1,364.80	16,378	33.62%
Total	**739,134**	**$ 20.23**	**$ 14,954,826**	**$ 27.03**	**$ 19,981,435**	**33.61%**

		Current		Proposed		
Broadkiln & Wilkerson	Number of Bills	Fixed Charges	Revenues	Fixed Charges	Revenues	Increase %
Monthly:						
Broadkiln	6,816	$ 39.99	$ 272,572	$ 45.31	$ 308,833	13.30%
Wilkerson						
5/8"	6,732	$ 33.84	$ 227,811	$ 38.34	$ 258,105	13.30%
1"	-	$ 52.30	$ -	$ 59.26	$ -	N/A
Total	**13,548**	**36.93**	**$ 500,383**	**$ 41.85**	**$ 566,938**	**13.30%**

		Current		Proposed		
Ocean View	Number of Bills	Fixed Charges	Revenues	Fixed Charges	Revenues	Increase %
Monthly:						
5/8"	9,960	$ 35.89	$ 357,431	$ 46.61	$ 464,236	29.88%
3/4"		$ 35.89	-	$ 46.61	-	N/A
1"	108	$ 57.59	6,220	$ 74.81	8,079	29.89%
1-1/2"	24	$ 101.00	2,424	$ 131.19	3,149	29.89%
2"	108	$ 154.42	16,677	$ 200.58	21,663	29.89%
3"	12	$ 295.07	3,541	$ 383.27	4,599	29.89%
4"	-	$ 456.58	-	$ 593.06	-	N/A
6"	-	$ 888.12	-	$ 1,153.59	-	N/A
8"	-	$ 1,383.93	-	$ 1,797.61	-	N/A
Service Availability	1,320	$ 32.55	42,970	$ 42.28	55,810	29.88%
Total	**11,532**	**37.22**	**$ 429,264**	**$ 48.35**	**$ 557,535**	**29.88%**

Total General Fixed Revenues	**764,214**		**$ 15,884,473**		**$ 21,105,908**	**32.87%**

Tidewater Utilities
Development Of General Service Rates

DEVELOPMENT OF USAGE CHARGE

Usage Charge Revenues	Tide Water (Legacy)	Broadkiln & Wilkerson	Ocean View	Total General
Proposed Usage Charge Revenues	$ 31,684,936	$ 250,720	$ 246,567	$ 32,182,224
Current Usage Charge Revenues	27,620,364	66,551	172,260	27,859,176
Increase Required ($)	$ 4,064,572	$ 184,169	$ 74,307	$ 4,323,048
Increase Required (%)	14.72%	276.73%	43.14%	15.52%

		Current		Proposed		
Rate Design	Usage	Rate	Revenues	Rate	Revenues	% Increase
Residential						
GMS 0-2,000	1,034,495	$ 8.6787	$ 8,978,069	$ 9.9563	$ 10,299,739	14.7%
GMS 2,001-7,000	1,122,448	$ 8.7906	9,866,994	$ 10.0847	11,319,554	14.7%
GMS Over 7,000	701,820	$ 8.9039	6,248,936	$ 10.2147	7,168,882	14.7%
Total Residential	2,858,763		$ 25,093,999		$ 28,788,176	14.7%
Commercial						
All Consumption	283,775	$ 8.9027	$ 2,526,365	$ 10.2133	$ 2,898,281	14.7%
Total Commercial	283,775		$ 2,526,365		$ 2,898,281	14.7%
Broadkiln & Wilkerson						
GMS 0-2,000	16,209	$ 1.2364	$ 20,040	$ 4.6574	$ 75,491	276.7%
GMS 2,001-7,000	13,845	$ 1.2519	17,333	$ 4.7180	65,323	276.9%
GMS Over 7,000	23,009	$ 1.2681	29,178	$ 4.7788	109,955	276.8%
Total Broadkiln & Wilkerson	53,063		$ 66,551		$ 250,768	276.8%
Ocean View						
GMS 0-2,000	12,943	$ 4.8024	$ 62,158	$ 6.7959	$ 87,961	41.5%
GMS 2,001-7,000	13,998	$ 4.8024	67,222	$ 6.8835	96,352	43.3%
GMS Over 7,000	8,929	$ 4.8024	42,880	$ 6.9723	62,255	45.2%
Total Ocean View	35,870		$ 172,260		$ 246,568	43.1%
Total General Usage Revenues	**3,231,471**		**$ 27,859,176**		**$ 32,183,793**	**15.5%**

Average Usage Assumption	Residential	Broadkiln & Wilkerson	Ocean View
GMS 0-2,000	1,034,495	16,209	12,943
GMS 2,001-7,000	1,122,448	13,845	13,998
GMS Over 7,000	701,820	23,009	8,929
Total Usage	2,858,763	53,063	35,870
Number of Customers	61,595	1,129	961
Annual Usage Per Customer	46.41	47.00	37.33

Tidewater Utilities
Development of Private and Public Fire Rates

DEVELOPMENT OF PUBLIC FIRE RATES

Cost Function		Total
Public Fire Cost of Service	**$**	**3,661,603**
Current Public Fire Revenues	$	3,286,404
Proposed Public Fire Revenues	$	3,286,404
Proposed Increase ($)	$	-
Proposed Increase (%)		0.00%
Public Fire Credit to General	$	375,200

		Current		Proposed		
Description	Number of Bills	Fixed Charges	Revenues	Fixed Charges	Revenues	Increase %
Public Fire:	728,838	$ 4.46	$ 3,250,617	$ 4.46	$ 3,250,617	0.0%
Dover AFB Public Fire	3,120	$ 11.47	$ 35,786	$ 11.47	$ 35,786	0.0%
Total	**731,958**		**$ 3,286,404**		**$ 3,286,404**	**0.00%**

Tidewater Utilities
Development of Private and Public Fire Rates

DEVELOPMENT OF PRIVATE FIRE RATES

Cost Function		Total
Private Fire Cost of Service	**$**	**217,780**
Current Private Fire Revenues	$	1,263,223
Proposed Private Fire Revenues	$	1,263,223
Proposed Increase ($)	$	-
Proposed Increase (%)		0.00%
Private Fire Credit to General	$	(1,045,442)

		Current		Proposed		
Description	Number of Bills	Fixed Charges	Revenues	Fixed Charges	Revenues	Increase %
Monthly:						
1"	48	$ 8.43	$ 405	$ 8.43	$ 405	0.0%
2"	732	$ 29.57	21,645	$ 29.57	21,645	0.0%
4"	1,644	$ 125.43	206,207	$ 125.43	206,207	0.0%
6"	2,940	$ 280.47	824,582	$ 280.47	824,582	0.0%
8"	396	$ 498.95	197,584	$ 498.95	197,584	0.0%
Ocean View						
6"	24	$ 533.33	$ 12,800	$ 533.33	12,800	0.0%
Total	**5,784**		**$ 1,263,223**		**$ 1,263,223**	

Tidewater Utilities
Development of Contract Rates

Development of Contract Rates

Overall Rate Increase % **19.77%**

	Current				Proposed				
Contract Revenue	**Test Period Gallons (TG)**	**Tariff Rate**		**Test Period**	**Tariff Rate**		**Test Period**	**Increase $**	**Increase %**
Contract Sales -DAFB	76,473	14.0648	$	1,075,575	16.8450	$	1,288,184	$ 212,610	19.77%
Contract Sales- Southern Shores	13,816	6.4372	$	88,939	7.7096	$	106,519	$ 17,580	19.77%
Total Contract Sales	90,289	12.8976	$	1,164,514	15.4471	$	1,394,703	$ 230,190	19.77%

Tidewater Utilities Revenue Analysis	Test Year Total	General Water	Public Fire	Private Fire	Wholesale
Revenue Summary					
Current Revenues					
Customer Charge	$ 15,884,473	$ 15,884,473			
Usage Charge	29,023,689	27,859,176		-	1,164,514
Fire Charges	4,549,627		3,286,404	1,263,223	
Total Current Revenues	**$ 49,457,789**	**$ 43,743,649**	**$ 3,286,404**	**$ 1,263,223**	**$ 1,164,514**
Proposed Revenues					
Customer Charge	$ 21,105,908	$ 21,105,908			
Usage Charge	33,578,496	32,183,793			1,394,703
Fire Charges	4,549,627		3,286,404	1,263,223	
Total Proposed Revenues	**$ 59,234,030**	**$ 53,289,701**	**$ 3,286,404**	**$ 1,263,223**	**$ 1,394,703**
Proposed Increase ($)	$ 9,776,242	$ 9,546,052	$ -	$ -	$ 230,190
Proposed Increase (%)	19.77%	21.82%	0.00%	0.00%	19.77%

Tidewater Utilities
Calculation of Typical Residential Bill Impacts

Tide Water (Legacy)		Current			Proposed			Increase $			Increase %		
Typical Residential Monthly Bill	**Usage (TG)**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**
Meter Type: 5/8" and 3/4"													
50% of Average Usage	1.93	$ 18.43	$ 17.18	$ 35.61	$ 24.05	$ 19.25	$ 43.30	$ 5.62	$ 2.07	$ 7.70	30.52%	12.07%	21.61%
75% of Average Usage	2.90	$ 18.43	$ 25.87	$ 44.30	$ 24.05	$ 29.00	$ 53.05	$ 5.62	$ 3.12	$ 8.75	30.52%	12.07%	19.74%
Average Tide Water Usage	3.87	$ 18.43	$ 34.58	$ 53.00	$ 24.05	$ 38.75	$ 62.80	$ 5.62	$ 4.17	$ 9.80	30.52%	12.07%	18.48%
125% of Average Usage	4.83	$ 18.43	$ 43.28	$ 61.70	$ 24.05	$ 48.50	$ 72.55	$ 5.62	$ 5.22	$ 10.84	30.52%	12.07%	17.58%
150% of Average Usage	5.80	$ 18.43	$ 51.98	$ 70.41	$ 24.05	$ 58.25	$ 82.30	$ 5.62	$ 6.27	$ 11.89	30.52%	12.07%	16.89%
200% of Average Usage	7.74	$ 18.43	$ 69.47	$ 87.89	$ 24.05	$ 77.85	$ 101.90	$ 5.62	$ 8.38	$ 14.00	30.52%	12.07%	15.93%
300% of Average Usage	11.60	$ 18.43	$ 104.72	$ 123.15	$ 24.05	$ 117.36	$ 141.41	$ 5.62	$ 12.64	$ 18.26	30.52%	12.07%	14.83%
400% of Average Usage	15.47	$ 18.43	$ 139.97	$ 158.40	$ 24.05	$ 156.86	$ 180.91	$ 5.62	$ 16.89	$ 22.51	30.52%	12.07%	14.21%

Broadkiln		Current			Proposed			Increase $			Increase %		
Typical Residential Monthly Bill	**Usage (TG)**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**
Meter Type: 5/8"													
50% of Average Usage	1.96	$ 40.94	$ 2.48	$ 43.42	$ 45.31	$ 9.12	$ 54.43	$ 4.37	$ 6.64	$ 11.01	10.68%	267.97%	25.37%
75% of Average Usage	2.94	$ 40.94	$ 3.73	$ 44.67	$ 45.31	$ 13.74	$ 59.05	$ 4.37	$ 10.01	$ 14.38	10.68%	268.03%	32.19%
Average B&W Usage	3.92	$ 40.94	$ 4.99	$ 45.93	$ 45.31	$ 18.36	$ 63.67	$ 4.37	$ 13.37	$ 17.74	10.68%	268.05%	38.63%
125% of Average Usage	4.90	$ 40.94	$ 6.24	$ 47.18	$ 45.31	$ 22.98	$ 68.29	$ 4.37	$ 16.73	$ 21.11	10.68%	268.07%	44.74%
150% of Average Usage	5.88	$ 40.94	$ 7.50	$ 48.44	$ 45.31	$ 27.60	$ 72.91	$ 4.37	$ 20.10	$ 24.47	10.68%	268.08%	50.52%
200% of Average Usage	7.83	$ 40.94	$ 10.02	$ 50.96	$ 45.31	$ 36.89	$ 82.20	$ 4.37	$ 26.87	$ 31.24	10.68%	268.10%	61.30%
300% of Average Usage	11.75	$ 40.94	$ 15.11	$ 56.04	$ 45.31	$ 55.60	$ 100.91	$ 4.37	$ 40.50	$ 44.87	10.68%	268.11%	80.06%
400% of Average Usage	15.67	$ 40.94	$ 20.19	$ 61.13	$ 45.31	$ 74.32	$ 119.63	$ 4.37	$ 54.13	$ 58.50	10.68%	268.11%	95.71%

Wilkerson		Current			Proposed			Increase $			Increase %		
Typical Residential Monthly Bill	**Usage (TG)**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**
Meter Type: 5/8"													
50% of Average Usage	1.96	$ 34.64	$ 2.48	$ 37.12	$ 38.34	$ 9.12	$ 47.46	$ 3.70	$ 6.64	$ 10.34	10.67%	267.97%	27.86%
75% of Average Usage	2.94	$ 34.64	$ 3.73	$ 38.37	$ 38.34	$ 13.74	$ 52.08	$ 3.70	$ 10.01	$ 13.70	10.67%	268.03%	35.71%
Average B&W Usage	3.92	$ 34.64	$ 4.99	$ 39.63	$ 38.34	$ 18.36	$ 56.70	$ 3.70	$ 13.37	$ 17.07	10.67%	268.05%	43.07%
125% of Average Usage	4.90	$ 34.64	$ 6.24	$ 40.88	$ 38.34	$ 22.98	$ 61.32	$ 3.70	$ 16.73	$ 20.43	10.67%	268.07%	49.98%
150% of Average Usage	5.88	$ 34.64	$ 7.50	$ 42.14	$ 38.34	$ 27.60	$ 65.94	$ 3.70	$ 20.10	$ 23.80	10.67%	268.08%	56.47%
200% of Average Usage	7.83	$ 34.64	$ 10.02	$ 44.66	$ 38.34	$ 36.89	$ 75.23	$ 3.70	$ 26.87	$ 30.56	10.67%	268.10%	68.43%
300% of Average Usage	11.75	$ 34.64	$ 15.11	$ 49.75	$ 38.34	$ 55.60	$ 93.94	$ 3.70	$ 40.50	$ 44.20	10.67%	268.11%	88.84%
400% of Average Usage	15.67	$ 34.64	$ 20.19	$ 54.83	$ 38.34	$ 74.32	$ 112.66	$ 3.70	$ 54.13	$ 57.83	10.67%	268.11%	105.47%

Wilkerson		Current			Proposed			Increase $			Increase %		
Typical Residential Monthly Bill	**Usage (TG)**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**
Meter Type: 1"													
50% of Average Usage	1.96	$ 53.54	$ 2.48	$ 56.02	$ 59.26	$ 9.12	$ 68.38	$ 5.72	$ 6.64	$ 12.36	10.68%	267.97%	22.07%
75% of Average Usage	2.94	$ 53.54	$ 3.73	$ 57.27	$ 59.26	$ 13.74	$ 73.00	$ 5.72	$ 10.01	$ 15.73	10.68%	268.03%	27.46%
Average B&W Usage	3.92	$ 53.54	$ 4.99	$ 58.53	$ 59.26	$ 18.36	$ 77.62	$ 5.72	$ 13.37	$ 19.09	10.68%	268.05%	32.62%
125% of Average Usage	4.90	$ 53.54	$ 6.24	$ 59.78	$ 59.26	$ 22.98	$ 82.24	$ 5.72	$ 16.73	$ 22.46	10.68%	268.07%	37.56%
150% of Average Usage	5.88	$ 53.54	$ 7.50	$ 61.04	$ 59.26	$ 27.60	$ 86.86	$ 5.72	$ 20.10	$ 25.82	10.68%	268.08%	42.30%
200% of Average Usage	7.83	$ 53.54	$ 10.02	$ 63.56	$ 59.26	$ 36.89	$ 96.15	$ 5.72	$ 26.87	$ 32.59	10.68%	268.10%	51.27%
300% of Average Usage	11.75	$ 53.54	$ 15.11	$ 68.65	$ 59.26	$ 55.60	$ 114.86	$ 5.72	$ 40.50	$ 46.22	10.68%	268.11%	67.33%
400% of Average Usage	15.67	$ 53.54	$ 20.19	$ 73.73	$ 59.26	$ 74.32	$ 133.58	$ 5.72	$ 54.13	$ 59.85	10.68%	268.11%	81.18%

Ocean View		Current			Proposed			Increase $			Increase %		
Typical Residential Monthly Bill	**Usage (TG)**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**	**Fixed Charge**	**Usage Charge**	**Total Bill**
Meter Type: 5/8"													
50% of Average Usage	1.56	$ 36.74	$ 7.65	$ 44.38	$ 46.61	$ 10.57	$ 57.18	$ 9.87	$ 2.92	$ 12.80	26.87%	38.23%	28.83%
75% of Average Usage	2.33	$ 36.74	$ 11.47	$ 48.21	$ 46.61	$ 15.88	$ 62.49	$ 9.87	$ 4.41	$ 14.29	26.87%	38.49%	29.64%
Average Ocean View Usage	3.11	$ 36.74	$ 15.29	$ 52.03	$ 46.61	$ 21.24	$ 67.85	$ 9.87	$ 5.94	$ 15.82	26.87%	38.87%	30.40%
125% of Average Usage	3.89	$ 36.74	$ 19.11	$ 55.85	$ 46.61	$ 26.59	$ 73.20	$ 9.87	$ 7.47	$ 17.35	26.87%	39.10%	31.06%
150% of Average Usage	4.67	$ 36.74	$ 22.94	$ 59.67	$ 46.61	$ 31.94	$ 78.55	$ 9.87	$ 9.00	$ 18.88	26.87%	39.25%	31.63%
200% of Average Usage	6.22	$ 36.74	$ 30.58	$ 67.32	$ 46.61	$ 42.65	$ 89.26	$ 9.87	$ 12.06	$ 21.94	26.87%	39.44%	32.58%
300% of Average Usage	9.33	$ 36.74	$ 45.87	$ 82.61	$ 46.61	$ 64.26	$ 110.87	$ 9.87	$ 18.39	$ 28.26	26.87%	40.09%	34.21%
400% of Average Usage	12.44	$ 36.74	$ 61.17	$ 97.90	$ 46.61	$ 85.95	$ 132.56	$ 9.87	$ 24.78	$ 34.66	26.87%	40.52%	35.40%